```
40
Ser Gln Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Phe Tyr Leu Ser
                        55
Phe Ala Asp Ala Cys Phe Ser Thr Thr Thr Ala Pro Arg Leu Ile Ala
                    70
Asp Ala Leu Leu Gln Lys Lys Ile Ile Thr Tyr Asn Glu Cys Met Thr
Gln Val Phe Ala Val His Phe Phe Gly Cys Met Glu Ile Phe Val Leu
                                105
Ile Leu Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Arg
                            120
                                                125
Tyr Thr Ala Ile Met Ser Gln Tyr Ile Cys Gly Val Leu Val Ile Leu
                                            140
Ala Trp Ile Gly Ser Cys Ile His Ser Ser Ala Gln Ile Phe Leu Ala
                    150
                                        155
Leu Arg Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe Cys
                165
                                    170
Asp Leu Gln Pro Leu Leu Lys Leu Ala Cys Met Asp Thr Tyr Val Ile
            180
                                185
                                                    190
Asn Leu Leu Val Val Ser Asn Ser Gly Ala Ile Cys Thr Val Ser Phe
       195
                            200
Ile Val Leu Leu Ile Ser Tyr Ile Val Ile Leu Tyr Ser Leu Arg Ser
                                            220
His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Thr Ser His
                    230
                                        235
Ile Ile Val Val Ile Leu Phe Phe Gly Pro Cys Ile Phe Ile Tyr Thr
                245
                                    250
Arg Pro Pro Thr Thr Phe Pro Ile Asp Lys Met Val Ser Leu Phe Tyr
            260
                                265
                                                    270
Thr Ile Gly Thr Pro Val Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn
       275
                            280
Ala Glu Val Lys His Ala Met Lys Lys Leu Trp Gly Asn Lys Val
```

<211> 303

<212> PRT

<213> Mus musculus

<400> 1907

 Met His Asn Tyr Ser
 Val Thr Glu Phe Ile Leu Phe Gly Leu Thr Gln

 1
 5

 Asp Pro Glu Lys Gln Lys Ala Ile Phe Gly Val Phe Leu Ile Leu Tyr

 20
 25

 25
 30

 Leu Met Thr Leu Ile Gly Asn Phe Leu Ile Val Met Thr Ile Lys Met

 35
 40

 Ser Gln Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Phe Tyr Leu Ser

 50
 55

 Phe Ala Asp Ala Cys Phe Ser Thr Thr Thr Ala Pro Arg Leu Ile Ile

 65
 70

 Asp Ala Leu Ser Gln Lys Lys Ile Ile Thr Tyr Asn Glu Cys Met Thr

 80

 Asp Ala Leu Ser Gln Lys Lys Ile Ile Thr Tyr Asn Glu Cys Met Thr

 90
 95

 Gln Val Phe Ala Ala His Phe Phe Gly Cys Met Glu Ile Phe Val Leu

 100
 105

 110

 Ile Leu Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Arg

 115

 Tyr Thr Thr Ile Met Ser Gln Arg Ile Cys Gly Ile Leu Val Ile Leu

 130

```
Ala Trp Val Gly Ser Cys Ile His Ser Ser Ala Gln Ile Phe Leu Ala
                    150
                                        155
Leu Arg Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe Cys
                                    170
                165
Asp Leu Gln Pro Leu Leu Lys Leu Ala Cys Met Asp Thr Tyr Val Ile
                                                    190
            180
                                185
Asn Leu Leu Val Val Ser Asn Ser Gly Ala Ile Cys Met Val Ser Phe
        195
                            200
Thr Leu Leu Leu Ile Ser Tyr Ile Phe Ile Leu Tyr Ser Leu Arg Asn
                        215
His Ser Val Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Thr Ser His
                                        235
                    230
Phe Ile Val Val Ile Phe Phe Gly Pro Cys Ile Phe Ile Tyr Thr
                                    250
Arg Pro Pro Thr Thr Phe Pro Ile Asp Lys Met Val Ser Val Phe Tyr
                                265
Thr Ile Gly Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn
Ala Glu Val Lys Ile Ala Met Lys Lys Leu Trp Cys Gly Lys Val
                        295
                                            300
```

<211> 317

<212> PRT

<213> Mus musculus

<400> 1908

Met Glu Leu Tyr Asn Leu Thr Ser Asn Leu Glu Phe Leu Leu Gly Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Leu Phe Ala Leu Phe Leu 20 Leu Ile Tyr Leu Leu Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala 40 Ile Ser Cys Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Tyr 55 60 Asn Leu Ser Leu Ser Asp Met Gly Phe Ser Ser Thr Thr Ile Pro Lys 75 70 Met Leu Ile Asn Leu His Ala His Asn Arg Thr Ile Thr Tyr Ala Glu 90 Cys Leu Thr Gln Val Ser Phe Phe Phe Leu Phe Gly Cys Met Asp Ser 105 Val Leu Leu Ala Val Met Ala Tyr Asp Arg Trp Val Ala Ile Cys His 120 Pro Leu His Tyr Gln Val Ile Leu Asn Pro Arg Leu Cys Arg Tyr Leu 135 Val Val Met Ser Phe Cys Ile Ser Leu Ile Asp Ser Gln Val His Cys 160 150 155 Phe Met Val Ser Gln Leu Lys Phe Cys Thr Asn Ile Lys Ile Pro His 170 Phe Phe Cys Asp Val Pro Glu Leu Leu Lys Leu Ala Cys Ser Asp Thr 185 Ser Ile Asn Ser Ile Val Ile Phe Leu Val Ser Ile Ile Val Gly Phe 200 205 Leu Pro Ala Ser Gly Ile Phe Tyr Ser Tyr Tyr Lys Ile Ile Ser Ser 215 220 Ile Val Arg Val Pro Ser Ser Gly Gly Lys Cys Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr Gly Leu

```
245
                                    250
Gly Val Tyr Leu Ser Ser Ser Ile Ser Ser Ser Ser Lys Glu Ser Val
                                265
                                                 270
Val Thr Ser Val Met Tyr Thr Met Val Val Pro Met Ile Asn Pro Phe
                            280
        275
Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Lys Ala Leu Gln Lys Ile
                        295
                                            300
Phe Ser Gln Ile Ile Met Leu Pro Thr Tyr Ile Ile Pro
                    310
<210> 1909
<211> 312
<212> PRT
<213> Mus musculus
<400> 1909
Met Glu Thr Val Asn Gln Thr Ile Ile Ser Glu Phe Ile Leu Leu Gly
                                    10
Leu Ser Asp Asp Pro Thr Leu Gln Pro Phe Ile Phe Thr Leu Phe Leu
                                25
Thr Ile Tyr Leu Ile Thr Thr Leu Gly Asn Leu Leu Ile Ile Leu Ala
        35
                            40
Val Ser Ser Asp Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Cys
                        55
Asn Leu Ser Phe Asn Asp Ile Cys Leu Ile Asn Thr Thr Ile Pro Lys
                    70
                                        75
Met Leu Val Asn Ile Gln Arg Glu Asp His Thr Ile Thr Tyr Thr Ala
                                    90
Cys Leu Ser Gln Val Tyr Leu Ile Leu Asn Phe Ala Gly Ile Glu Asn
           100
                                105
Cys Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
                                                125
       115
Pro Leu Lys Tyr Thr Val Ile Met Asn Gln Tyr Val Cys Ala Met Leu
                        135
                                            140
Leu Leu Phe Ser Leu Phe Leu Ser Ile Val His Ala Leu Phe His Thr
                   150
                                        155
Leu Met Ile Leu Leu Ser Phe Cys Thr Glu Ile Glu Ile Pro His
                165
                                    170
Phe Phe Cys Glu Leu Ala Gln Ile Ile Arg Leu Ala Cys Ser Asp Asn
            180
                                185
                                                    190
Phe Ile Asn Tyr Leu Leu Val Tyr Thr Val Ser Val Leu Phe Phe Gly
                            200
Val Pro Val Phe Gly Ile Ile Leu Ser Tyr Ile His Ile Ile Ser Ser
                        215
                                            220
Val Leu Lys Met Ser Ser Leu Gly Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Gly Phe
                245
                                    250
Gly Val His Ile Ser Ser Ala Phe Thr Asp Ser Pro Lys Lys Thr Val
                                265
Val Ala Ser Val Met Tyr Thr Ile Ile Thr Gln Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Met Lys Lys Ala Phe Arg Lys Ile
                        295
                                            300
Thr Ser Lys Ile Pro Phe Leu Leu
                    310
```

```
<210> 1910
<211> 309
<212> PRT
<213> Mus musculus
<400> 1910
Met Glu Pro Tyr Asn Ser Thr Gly Thr Leu Glu Phe Ile Leu Leu Gly
Leu Ser Glu Asp Pro Glu Leu Gln Phe Ile Leu Phe Ala Leu Phe Leu
Leu Ile Tyr Leu Leu Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
                            40
Ile Ser Cys Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Tyr
Asn Leu Ser Leu Ala Asp Met Gly Phe Ser Ser Thr Thr Ile Pro Lys
                    70
                                        75
Met Leu Ile Asn Leu His Ala His Asn Arg Ser Thr Thr Tyr Ala Glu
                                    90
Cys Leu Thr Gln Val Ser Phe Phe Ile Leu Phe Gly Cys Met Asp Ser
           100
                                105
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Trp Val Ala Ile Cys His
                            120
       115
                                                125
Pro Leu His Tyr Gln Val Ile Leu Asn Pro Cys Arg Cys Arg Tyr Leu
                        135
                                            140
Val Val Met Ser Phe Cys Ile Ser Leu Ile Asp Ser Gln Val His Cys
                    150
                                        155
Phe Met Val Ser Gln Leu Thr Phe Cys Thr Asn Ile Glu Ile Pro His
                                    170
                165
                                                        175
Phe Phe Cys Asp Val Pro Glu Leu Val Lys Leu Ala Cys Ser Asn Thr
           180
                                185
                                                    190
Thr Ile Asn Asp Ile Ala Met Phe Leu Ser Ser Ile Ile Thr Gly Phe
                            200
                                                205
Leu Pro Ala Ser Gly Ile Phe Tyr Ser Tyr Tyr Lys Ile Thr Ser Ser
                        215
                                            220
Ile Phe Arg Val Pro Ser Leu Leu Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr Gly Ile
               245
                                    250
Gly Val Tyr Leu Ser Ser Thr Val Ser Ser Ser Lys Glu Ser Met
                                265
           260
Val Ala Ser Val Met Tyr Thr Met Val Val Pro Met Met Asn Pro Phe
                            280
                                               285
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Lys Ala Leu Trp Lys Ile
                        295
Val Cys Lys Ile Thr
305
<210> 1911
<211> 312
<212> PRT
<213> Mus musculus
<400> 1911
Met Glu Pro Gly Asn Gln Thr Gly Thr Ser Tyr Phe Ile Leu Met Arg
                                    10
Leu Asn Tyr Asp Pro Thr Val Glu Pro Leu Ile Phe Gly Phe Phe Met
Phe Thr Tyr Leu Val Thr Ile Val Gly Asn Leu Leu Ile Ile Ile Ala
```

```
40
Val Ser Ser Asp Ser His Leu Gln Thr Pro Met Tyr Leu Phe Leu Ser
                        55
Lys Leu Ser Phe Thr Asp Ile Cys Leu Ser Thr Thr Thr Val Pro Asn
                    70
Met Leu Lys Asn Ile His Thr Gln Asp His Ser Ile Ser Tyr Thr Gly
                                    90
Cys Leu Thr Gln Ala Cys Phe Val Leu Ser Phe Ala Val Leu Glu Ser
Ser Val Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys His
                            120
Pro Leu Asn Tyr Thr Val Ile Met Asn Pro Gln Phe Cys Gly Leu Leu
                        135
                                            140
Ile Leu Leu Ser Leu Ile Ile Ser Thr Ala Asn Ser Leu Leu Gln Cys
                    150
                                        155
Leu Met Ile Leu Arg Leu Ser Phe Cys Thr Asn Asn Glu Leu Pro Leu
                                    170
Phe Phe Cys Glu Leu Ala Gln Val Ile Lys Leu Ala Cys Ser Asp Thr
                                185
                                                    190
Leu Ile Asn Tyr Ile Leu Ile Tyr Leu Ala Thr Phe Ile Phe Gly Gly
                            200
Ile Pro Ile Ser Gly Ile Ile Phe Ser Tyr Thr Arg Ile Val Ser Ser
                        215
                                            220
Ile Leu Lys Ile Ser Ser Leu Arg Gly Arg Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Phe Val Val Val Ser Leu Phe Tyr Gly Ala Ala Val
                245
                                    250
Gly Val Tyr Ile Cys Ser Ala Ile Thr Val Ser Pro Gln Ile Thr Thr
                                265
Val Ser Tyr Met Met Tyr Thr Val Leu Pro Gln Met Leu Asn Pro Phe
        275
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Lys Ala Leu Gly Lys Leu
                        295
Ile Thr Lys Val Ser Cys Phe Leu
<210> 1912
<211> 312
<212> PRT
<213> Mus musculus
<400> 1912
Met Glu Pro Gln Asn Lys Thr Phe Val Leu Gln Phe Leu Leu Gly
Phe Thr Asp Asp Ala Glu Leu Gln Cys Leu Ile Phe Ser Leu Phe Leu
                                25
Phe Ile Tyr Leu Val Thr Ile Leu Gly Asn Leu Leu Ile Ile Leu Cys
Ile Ser Ser Glu Ser His Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ser Phe Asn Asp Ile Gly Leu Ser Thr Ala Thr Val Ile Lys
                    70
Met Leu Val Asn Ile Gln Ala Asn Asp Gln Ser Ile Thr Tyr Thr Asp
                                    90
Cys Leu Thr Gln Leu Phe Phe Val Leu Ala Phe Ala Tyr Phe Glu Asn
```

Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys His 115 120 125

```
Pro Leu Arg Tyr Asn Ile Ile Met Asn Pro Asn Leu Cys Val Leu Leu
Ser Leu Asn Ser Leu Phe Ile Ser Val Met Asp Ser Leu Ile His Thr
                                        155
Leu Met Val Gln Arg Leu Ser Phe Cys Thr Asp Leu Glu Ile Pro His
                165
                                    170
Phe Phe Cys Glu Leu Asp Gln Val Ile Lys Leu Ser Cys Ser Asp Thr
                                185
Arg Ile Asp Asn Ile Val Leu Phe Val Ala Thr Cys Val Phe Gly Gly
       195
                            200
Val Pro Leu Cys Gly Ile Ile Tyr Ser Tyr Tyr His Ile Met Ser Thr
                        215
Ile Leu Lys Ile Thr Ser Leu Glu Gly Lys Tyr Lys Ala Phe Ser Thr
                                        235
                    230
Cys Gly Thr His Leu Ser Val Val Ser Leu Phe Tyr Gly Ala Gly Ser
                245
                                    250
Met Val Tyr Ile Ser Ser Ala Ile Ser Ala Ser Pro Gly Lys Ser Ala
                                265
Val Ala Ser Val Met Tyr Ser Val Leu Pro Gln Met Met Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Val Ala Ile Arg Asn Leu
                       295
Phe Ser Arg Thr Ile Ser Leu Glu
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1913

Met Asn Asn Met Glu Lys Arg Asn Gln Thr Thr Phe Pro Gly Phe Leu 10 Leu Leu Gly Leu Thr Glu Asp Pro Lys Leu Gln Pro Val Phe Val Ser 25 Leu Phe Phe Ser Ile Tyr Leu Ile Thr Ile Leu Gly Asn Leu Leu Ile 40 Ile Leu Ile Ser Ile Ser Asp Ala His Leu His Thr Pro Met Tyr Leu 55 Phe Leu Ser Asn Leu Ser Leu Asn Asp Ile Cys Leu Ser Thr Ser Thr 70 75 Ile Pro Lys Met Leu Val Asn Ile Lys Glu Asn Ser Gln Ser Ile Thr 85 90 Tyr Lys Gly Cys Leu Thr Gln Met Ser Phe Val Leu Ile Phe Cys Gly 100 105 110 Met Glu Asn Cys Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Ile Ala 120 125 Ile Cys His Pro Leu Arg Tyr Thr Val Ile Met Glu Pro Cys Phe Cys 135 140 Val Leu Leu Ile Leu Leu Ser Leu Leu Ile Ser Val Val Asp Thr Leu 150 155 Met His Ser Leu Met Val Leu Arg Leu Ser Phe Cys Thr His Leu Glu 165 170 Ile Ser Asn Phe Ile Cys Glu Leu Pro Gln Ile Leu Lys Leu Ala Cys 185 190 Ser Asp Thr Leu Ile Asp Asn Ile Leu Ile Tyr Leu Ser Ala Cys Ile 200 Phe Thr Gly Ile Pro Ile Ser Gly Ile Val Phe Ser Tyr Val His Ile

```
215
Ile Ser Ser Ile Leu Arg Met Ser Ser Leu Glu Gly Lys His Lys Ala
                    230
Phe Thr Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
                                    250
               245
Thr Ala Phe Gly Val Tyr Ile Thr Ser Ile Ile Met Asp Ser Ser Arg
            260
                                265
Asn Thr Ala Val Ala Ser Val Met Tyr Ser Val Val Pro Gln Met Leu
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Met
                        295
Gly Lys Phe Phe Ser Arg Met Ala Ser Phe Leu
                    310
<210> 1914
<211> 315
<212> PRT
<213> Mus musculus
<400> 1914
Met Asn Asn Met Glu Lys Arg Asn Gln Thr Ala Phe Pro Gly Phe Leu
Leu Leu Gly Leu Thr Glu Asp Pro Lys Leu Gln Pro Val Leu Val Ser
                                25
Leu Phe Phe Ser Ile Tyr Leu Val Thr Ile Phe Gly Asn Met Leu Ile
Val Leu Ile Ser Ile Ser Asp Ser His Leu His Thr Pro Met Tyr Leu
                        55
Leu Leu Ser Asn Leu Ser Leu Asn Asp Ile Cys Leu Ser Thr Ser Thr
                    70
                                        75
Ile Pro Lys Met Leu Val Asn Ile Gln Glu Asn Ile Gln Ser Ile Thr
                                    90
Tyr Lys Gly Cys Leu Thr Gln Met Asn Phe Val Leu Ile Phe Gly Gly
           100
                                105
Met Glu Asn Cys Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala
       115
                            120
                                                125
Ile Cys His Pro Leu Arg Tyr Thr Val Ile Met Glu Pro Cys Phe Cys
                        135
                                            140
Ile Leu Leu Ile Leu Leu Ser Leu Leu Ile Ser Ile Val Asp Ser Leu
                    150
                                        155
Met His Ser Leu Met Val Leu Arg Leu Pro Phe Cys Thr His Leu Glu
                165
                                    170
Ile Pro Ser Phe Phe Cys Glu Leu Pro Lys Met Leu Lys Leu Ala Cys
                                185
                                                    190
Ser Asp Thr Leu Ile Asp Asn Ile Leu Ile Tyr Ile Ser Ser Cys Ile
                            200
Phe Ala Gly Ile Pro Leu Ser Gly Ile Val Phe Ser Tyr Ile His Ile
                        215
                                            220
Met Ser Ser Ile Leu Arg Met Ser Ser Ser Glu Gly Lys His Lys Ala
                    230
                                        235
Phe Thr Thr Cys Gly Ser His Leu Ser Val Val Phe Leu Phe Tyr Gly
                245
                                    250
Thr Gly Phe Gly Val Tyr Ile Thr Ser Ile Ile Met Asp Ser Ser Arg
Lys Thr Ala Val Ala Ser Val Met Tyr Ser Val Val Pro Gln Met Leu
                            280
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Asp Thr Met
                                            300
```

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305
                    310
<210> 1915
<211> 312
<212> PRT
<213> Mus musculus
<400> 1915
Met Glu Val Asp Ser Asn Ser Ser Ser Gly Ser Phe Ile Leu Met Gly
                                    10
Val Ser Asp His Pro His Leu Glu Ile Ile Phe Phe Ala Val Ile Leu
            20
Ala Ser Tyr Leu Leu Thr Leu Val Gly Asn Leu Thr Ile Ile Leu Leu
        35
                            40
Ser Arg Leu Asp Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Asn Leu Ser Ser Leu Asp Leu Ala Phe Thr Thr Ser Ser Val Pro Gln
                    70
Met Leu Lys Asn Leu Trp Gly Pro Asp Lys Thr Ile Ser Tyr Gly Gly
                                    90
Cys Val Thr Gln Leu Tyr Val Phe Leu Trp Leu Gly Ala Thr Glu Cys
                                105
Ile Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg
                            120
Pro Leu His Tyr Met Thr Val Met Asn Pro Arg Leu Cys Trp Gly Leu
                        135
                                            140
Ala Ala Ile Ser Trp Leu Gly Gly Leu Gly Asn Ser Val Ile Gln Ser
Thr Phe Thr Leu Gln Leu Pro Phe Cys Gly His Arg Lys Val Asp Asn
                                    170
                                                         175
Phe Leu Cys Glu Val Pro Ala Met Ile Lys Leu Ala Cys Gly Asp Thr
                                185
                                                     190
Ser Leu Asn Glu Ala Val Leu Asn Gly Val Cys Thr Phe Phe Thr Val
        195
                            200
                                                 205
Val Pro Val Ser Val Ile Leu Val Ser Tyr Cys Phe Ile Ala Gln Ala
                        215
                                            220
Val Met Lys Ile Arg Ser Val Glu Gly Arg Arg Lys Ala Phe Asn Thr
                    230
                                        235
Cys Val Ser His Leu Val Val Phe Leu Phe Tyr Gly Ser Ala Ile
                245
                                    250
Tyr Gly Tyr Leu Leu Pro Ala Lys Ser Ser Asn Gln Ser Gln Gly Lys
            260
                                265
                                                     270
Phe Ile Ser Leu Phe Tyr Ser Val Val Thr Pro Met Val Asn Pro Leu
                            280
Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Gly Arg Leu
    290
                        295
                                            300
Leu Gly Lys Gly Arg Gly Ala Ser
305
                    310
<210> 1916
<211> 307
<212> PRT
<213> Mus musculus
<400> 1916
```

Met Ala Pro Val Asn Gln Ser Ala Ile Thr Met Phe Ile Leu Gln Asn

Arg Lys Phe Phe Ser Arg Ile Ala Ser Val Leu

```
Phe Val Asp Asp Pro Trp Ile Gln Asp Val Leu Phe Cys Leu Leu Phe
                                25
Ala Leu Phe Met Ala Ala Ile Ala Gly Asn Gly Leu Ile Ile Ala Thr
                            40
Ile His Ser Ser Pro Asn Leu His Thr Pro Met Tyr Phe Phe Leu Val
Asn Leu Ala Leu Met Asp Met Ile Cys Thr Val Thr Val Leu Pro Lys
                    70
Val Leu Gln Ser Leu Val Ala Glu Asn Ser Ile Ser Tyr Gly Gly Cys
                                    90
Leu Ile Gln Met Phe Val Phe Ser Trp Val Leu Gly Ser Glu Leu Leu
                                105
Leu Phe Ser Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg Pro
                            120
Leu His Tyr Gly Thr Leu Met Ser Gly Arg Val Cys Val Ala Leu Ala
                        135
                                            140
Thr Phe Val Trp Phe Ile Gly Ala Leu Asn Ser Leu Val Leu Thr Cys
                    150
                                        155
Leu Val Leu Pro Leu Ser Phe Cys Gly Ser Asn Leu Ile Ala His Phe
                165
                                    170
Phe Cys Glu Ile Pro Ser Val Leu Ile Leu Ser Cys Ser Pro Thr Phe
            180
                                185
                                                     190
Ile Asn Asn Val Met Thr Val Ile Ala Asp Met Phe Leu Thr Gly Leu
        195
                            200
                                                 205.
Asn Phe Leu Leu Thr Met Thr Ser Tyr Val Phe Ile Ile Ser Ser Ile
                        215
                                            220
Leu Arg Ile Arg Ser Ala Glu Gly Lys Lys Arg Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ala His Leu Val Val Thr Leu Tyr Tyr Ser Thr Ala Leu Tyr
                                    250
Thr Tyr Val Arg Pro Ala Leu Gly Thr Ala Gly Leu Leu Asp Lys Val
            260
                                265
Ile Ala Ile Pro Tyr Thr Thr Val Thr Pro Ser Leu Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Glu Phe Lys Thr Ser Phe Lys Lys Leu Leu
Phe Pro Arg
305
<210> 1917
<211> 307
<212> PRT
<213> Mus musculus
<400> 1917
Met Ala Leu Val Asn Gln Ser Val Val Thr Met Phe Ile Leu Gln Arq
                                    10
Phe Val Asp Asp Pro Trp Ile Gln Asp Val Leu Phe Cys Leu Phe Phe
Ala Leu Phe Met Ala Ala Ile Ala Gly Asn Gly Leu Ile Ile Ala Thr
Ile His Ser Ser Pro Asn Leu His Thr Pro Met Tyr Phe Phe Leu Val
Asn Leu Ser Leu Met Asp Val Ile Cys Thr Val Thr Val Leu Pro Lys
                    70
                                        75
Val Leu Gln Ser Leu Val Ala Glu Asn Ser Ile Ser Tyr Gly Gly Cys
```

```
Leu Thr Gln Met Phe Val Phe Ser Trp Val Leu Gly Ser Glu Leu Leu
                                105
Leu Phe Ser Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg Pro
                            120
Leu His Tyr Gly Thr Leu Met Ser Gly Lys Val Cys Val Ala Leu Ala
                        135
Thr Phe Val Trp Phe Thr Gly Ala Leu Asn Ser Leu Val Leu Thr Cys
                    150
Leu Met Leu Pro Leu Ser Phe Cys Gly Pro Asn Leu Ile Thr His Phe
                                    170
Phe Cys Glu Ile Pro Ser Val Leu Ile Leu Ser Cys Ser Pro Thr Phe
                                                    190
Ile Asn Asp Ile Met Thr Val Ile Thr Asp Met Phe Leu Thr Gly Leu
       195
                            200
Asn Phe Leu Leu Thr Met Thr Ser Tyr Val Phe Ile Ile Ala Ser Ile
Leu Arg Ile Arg Ser Ala Glu Gly Lys Lys Arg Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ala His Leu Val Val Thr Leu Tyr Tyr Ser Thr Val Leu Tyr
                                    250
Thr Tyr Val Arg Pro Ala Leu Gly Thr Ala Gly Phe Leu Asp Lys Leu
                                                    270
Ile Ala Val Leu Tyr Thr Thr Val Thr Pro Ser Leu Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Glu Phe Lys Ile Ser Phe Lys Lys Leu Leu
Phe Pro His
305
```

<210> 1918 <211> 317 <212> PRT

<213> Mus musculus

<400> 1918

Met Ser Ser Lys Tyr Leu Met Ala Trp Ser Thr Gly Gln Asn Leu Ser Thr Pro Gly Pro Phe Ile Leu Leu Gly Phe Pro Gly Pro Arg Ser Met 25 Arg Ile Gly Leu Phe Leu Phe Leu Val Met Tyr Leu Leu Thr Val 40 Ala Gly Asn Leu Ala Ile Ile Ser Leu Val Gly Ala His Arg Cys Leu Gln Thr Pro Met Tyr Phe Phe Leu Cys Asn Leu Ser Phe Leu Glu Ile Trp Phe Thr Thr Ala Cys Val Pro Lys Thr Leu Ala Thr Phe Ala Pro 90 Arg Gly Gly Ala Ile Ser Leu Ala Gly Cys Ala Thr Gln Met Tyr Phe Val Phe Ser Leu Gly Cys Thr Glu Tyr Phe Leu Leu Ala Val Met Ala 120 Tyr Asp Arg Tyr Leu Ala Ile Cys Leu Pro Leu Arg Tyr Gly Gly Ile 135 Met Thr Pro Gly Leu Ala Thr Arg Leu Ala Leu Gly Ser Trp Leu Cys 150 155 Gly Phe Ser Ala Ile Ile Val Pro Ala Ala Leu Ile Ala Arg Leu Ser 170 Phe Cys Gly Ser Arg Val Ile Asn His Phe Phe Cys Asp Ile Ser Pro

```
180
                                185
Trp Ile Val Leu Ser Cys Thr Asp Thr Gln Val Val Glu Leu Val Ser
                            200
                                                 205
Phe Gly Ile Ala Phe Cys Val Ile Leu Gly Ser Cys Gly Ile Thr Leu
                        215
                                             220
Val Ser Tyr Ala Tyr Ile Ile Thr Thr Ile Ile Lys Ile Pro Ser Ala
                    230
                                        235
Gln Gly Arg His Arg Ala Phe Ser Thr Cys Ser Ser His Leu Thr Val
                245
                                    250
Val Leu Ile Trp Tyr Gly Ser Thr Ile Phe Leu His Val Arg Thr Ser
                                265
                                                     270
Val Glu Ser Ser Leu Asp Leu Thr Lys Ala Val Thr Val Leu Asn Thr
                            280
Ile Val Thr Pro Val Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys
                        295
Asp Val Lys Glu Ala Leu Arg Arg Thr Met Lys Gly Lys
                    310
<210> 1919
<211> 313
<212> PRT
<213> Mus musculus
<400> 1919
Met Ser Lys Gly Arg Glu Asn Glu Thr Gly Val Ser Glu Phe Leu Leu
                                    10
Leu Gly Ile Thr Asn Asp Pro Gln Gln Gln Ile Leu Phe Trp Ala
                                25
Phe Leu Cys Met Tyr Leu Val Thr Val Ala Gly Asn Thr Leu Ile Phe
        35
                            40
Leu Ala Ile Ile Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe
Leu Ala Asn Leu Ser Phe Val Asp Val Cys Phe Thr Thr Asn Leu Ile
Pro Arg Leu Leu Ala Gly His Val Ala Gly Thr Arg Thr Ile Ser Tyr
                                    90
Val His Cys Leu Thr Gln Thr Tyr Phe Leu Ile Ser Phe Ala Asn Val
                                105
                                                    110
Asp Thr Phe Leu Leu Ala Ala Met Ala Leu Asp Arg Phe Val Ala Ile
                            120
                                                125
Cys Tyr Pro Leu Gln Tyr His Thr Ile Ile Thr Pro Gln Leu Cys Val
                        135
Gly Leu Ala Ala Val Val Trp Met Cys Ser Ala Leu Ile Ser Leu Met
                    150
                                        155
```

His Thr Leu Leu Met Ser Arg Leu Ser Phe Cys Ser Ser Ile Pro Glu

Ile Ser His Phe Tyr Cys Asp Ala Tyr Leu Leu Met Lys Leu Ala Cys 185

Ser Asp Thr Arg Val Asn Gln Leu Val Phe Leu Gly Ala Val Val Leu

Met Val Val Leu Gln Ile Pro Ser Ala Lys Gly Arg His Lys Thr Phe

Ser Thr Cys Ser Ser His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr

Val Leu Gly Ile Tyr Ile Arg Pro Pro Asp Ser Phe Ser Thr Gln Asp

265

200 Phe Val Ala Pro Cys Ile Leu Ile Val Val Ser Tyr Val Arg Ile Thr

215

230

245

260

195

170

250

190

270

255

220

Thr Val Ala Thr Ile Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro 280 Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Ser Val Thr Arg 295 300 Leu Leu Asn Arg Gly Ser Lys Ser Ser 310 <210> 1920 <211> 313 <212> PRT <213> Mus musculus <400> 1920 Met Ser Lys Gly Arg Glu Asn Glu Thr Gly Val Ser Glu Phe Leu Leu Leu Gly Ile Thr Asn Asp Pro Gln Gln Gln Ile Leu Phe Trp Ala Phe Leu Cys Met Tyr Leu Val Thr Val Ala Gly Asn Thr Leu Ile Phe 35 Leu Ala Ile Ile Ser Asp Pro Cys Leu His Thr Pro Met Tyr Phe Phe 55 Leu Ala Asn Leu Ser Phe Val Asp Val Cys Phe Thr Thr Asn Leu Ile 70 Pro Arg Leu Leu Ala Gly His Val Ala Gly Thr Arg Thr Ile Ser Tyr 90 95 Ala Gln Cys Leu Thr Gln Met Phe Phe Met Ile Ser Phe Ala His Val 105 Asp Thr Leu Leu Ala Ala Met Ala Leu Asp Arg Phe Val Ala Ile 120 Cys Tyr Pro Leu Gln Tyr His Thr Ile Ile Thr Pro Gln Leu Cys Val 135 140 Gly Leu Ala Ala Val Val Trp Met Cys Ser Ala Leu Ile Ser Leu Met 150 155 His Thr Leu Leu Met Ser Arg Leu Arg Phe Cys Ser Ser Ile Pro Glu 170 Ile Ser His Phe Tyr Cys Asp Ala Tyr Leu Leu Met Lys Leu Ala Cys 185 190 Ser Asp Thr Arg Val Asn Gln Leu Ala Ser Leu Gly Thr Leu Phe Leu 200 Phe Val Ala Pro Cys Ile Leu Ile Val Val Ser Tyr Val Arg Ile Thr 215 Met Ala Val Phe Gln Ile Pro Ser Ala Lys Gly Arg His Lys Ala Phe 235 230 Ser Thr Cys Ser Ser His Leu Ser Val Val Ile Leu Phe Tyr Gly Thr 250 255 Ile Leu Gly Ile Tyr Ile Arg Pro Pro Gly Ser Phe Ser Ile Gln Val 265 270 Ser Val Ala Thr Ile Met Tyr Thr Val Phe Thr Pro Met Leu Asn Pro 280 Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Thr Val Thr Arg 295 300 Ile Leu Asn Arg Asp Ser Lys Pro Ser 310 <210> 1921

<211> 305

<212> PRT

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<400> 1921
Met Asn Cys Ser Gln Ala Pro Thr Leu Ile Leu Leu Gly Leu Ser Ser
                                    10
Asp Ala Glu Lys Trp Gln Pro Leu Phe Ser Ile Phe Leu Val Ile Tyr
Leu Leu Gly Leu Leu Gly Asn Leu Leu Leu Leu Ala Ile Gly Thr
Asp Val His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser
Phe Val Asp Leu Cys Phe Ile Thr Thr Ala Pro Lys Met Leu Glu
Ala Leu Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu Thr
Gln Leu Tyr Phe Phe Ala Val Phe Ala Asp Met Asp Asn Leu Leu
            100
Ala Val Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys His Pro Leu Arg
                            120
Tyr Ser Ala Leu Met Thr Pro Phe Arg Cys Gly Val Leu Val Ser Gly
                        135
                                            140
Ser Trp Gly Val Thr Asn Cys Val Ser Leu Thr His Thr Leu Leu Leu
                    150
                                        155
Ser Lys Leu Tyr Phe His Thr Asn Gln Glu Ile Pro His Phe Phe Cys
                165
                                    170
Glu Phe Gly Pro Leu Leu Leu Ser Cys Ser Asp Thr His Leu Asn
            180
                                                    190
Lys Ile Leu Val Ile Ile Leu Val Gly Ile Leu Gly Ile Ser Ala Val
        195
                            200
Leu Cys Ile Val Ser Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala Lys
                        215
Val Pro Ser Ala Gln Gly Lys Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Leu Ser Val Val Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr Tyr
                                    250
Leu Lys Pro Pro Ser Ser Ser Arg Ser Ser Glu Glu Val Val Ala Ala
                                265
Val Met Tyr Ser Leu Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Ser
                            280
Leu Arg Asn Lys Asp Val Lys Ser Ser Leu Arg Arg Ile Leu Asn Met
                                            300
Glu
305
<210> 1922
<211> 313
<212> PRT
<213> Mus musculus
<400> 1922
Met Gly Ile Leu Ser Thr Gly Asn Gln Thr Val Thr Glu Phe Val Leu
Leu Gly Phe His Glu Val Pro Gly Leu His Leu Leu Phe Phe Ser Val
           2.0
Phe Thr Ile Leu Tyr Ala Ser Ile Ile Thr Gly Asn Met Leu Ile Ala
                            40
Val Val Val Ser Ser Gln Arg Leu His Thr Pro Met Tyr Phe Phe
```

```
Leu Val Asn Leu Ser Phe Ile Glu Ile Val Tyr Thr Ser Thr Val Val
                    70
                                         75
Pro Lys Met Leu Glu Gly Phe Leu Gln Glu Ala Thr Ile Ser Val Ala
                8.5
                                    90
Gly Cys Leu Leu Gln Phe Phe Val Phe Gly Ser Leu Ala Thr Asp Glu
            100
                                105
Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys
                            120
His Pro Leu Arg Tyr Pro His Leu Met Gly Pro Gln Trp Cys Leu Gly
                        135
Leu Val Leu Thr Val Trp Leu Ser Gly Phe Met Val Asp Gly Leu Val
                    150
Val Ala Leu Met Ala Gln Leu Arg Phe Cys Gly Pro Asn Leu Val Asp
                                    170
His Phe Tyr Cys Asp Phe Ser Pro Leu Met Val Leu Ala Cys Ser Asp
            180
                                185
Thr Gln Val Ala Gln Val Thr Thr Phe Val Leu Ser Val Val Phe Leu
        195
                            200
Thr Val Pro Phe Gly Leu Val Leu Ile Ser Tyr Ala Gln Ile Val Val
                        215
Thr Val Leu Arg Val Pro Ser Gly Thr Arg Arg Thr Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ser Ser His Leu Ala Val Val Ser Thr Phe Tyr Gly Thr Leu
                245
                                    250
Met Val Leu Tyr Ile Val Pro Ser Ala Val His Ser Gln Leu Leu Ser
            260
                                265
Lys Val Ile Ala Leu Leu Tyr Thr Val Val Thr Pro Ile Phe Asn Pro
                            280
Val Ile Tyr Thr Leu Arg Asn Gln Glu Val Gln Gln Ala Leu Arg Arg
                        295
                                            300
Leu Leu Tyr Cys Lys Pro Thr Glu Met
                    310
<210> 1923
```

<400> 1923

Met Gly Thr Asn Ser Ser Leu Val Thr Glu Phe Val Leu Val Gly Phe 10 Ser Arg Leu Val His Leu Gln Gly Ile Leu Phe Ser Leu Phe Leu Thr 20 25 Val Tyr Leu Leu Thr Val Ala Gly Asn Leu Leu Ile Val Ala Leu Val 40 Ser Thr Asp Ala Ala Leu Gln Ser Pro Met Tyr Phe Phe Leu Arg Ile 55 60 Leu Ser Ala Leu Glu Ile Cys Tyr Thr Ser Val Thr Val Pro Leu Leu 70 75 Leu His His Leu Leu Thr Gly Arg Arg His Ile Ser Arg Ser Gly Cys 8.5 90 Ala Leu Gln Met Phe Phe Phe Leu Phe Phe Gly Ala Thr Glu Cys Cys 100 105 110 Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Glu Pro 120 125 Leu Arg Tyr Gln Val Leu Leu Ser Arg Arg Val Cys Val Gln Leu Ala 135 Gly Ala Ala Trp Ser Cys Gly Ala Leu Val Gly Leu Gly His Thr Ser

<211> 312

<212> PRT

<213> Mus musculus

```
145
                    150
Phe Ile Phe Ser Leu Pro Phe Cys Gly Pro Asn Ala Val Pro His Phe
                                    170
                165
Phe Cys Glu Ile Gln Pro Val Leu Gln Leu Val Cys Gly Asp Thr Ser
                                                     190
            180
                                185
Leu Asn Glu Leu Gln Ile Ile Leu Ala Ala Ala Leu Ile Ile Leu Cys
                            200
Pro Phe Gly Leu Ile Leu Ser Ser Tyr Gly Arg Ile Leu Val Thr Ile
                        215
Phe Arg Ile Pro Ser Ala Ala Gly Arg Arg Lys Ala Phe Ser Thr Cys
                                        235
                    230
Ser Ser His Leu Val Val Val Ser Leu Phe Tyr Gly Thr Ala Ile Phe
                                    250
Ile Tyr Ile Arg Pro Lys Ala Ser Tyr Asp Pro Thr Thr Asp Pro Leu
                                                     270
            260
                                265
Leu Ser Leu Phe Tyr Ala Val Ile Thr Pro Ile Leu Asn Pro Val Ile
                            280
Tyr Ser Leu Arg Asn Ala Asp Val Lys Ala Ala Leu Lys Arg Ser Ile
                        295
                                             300
Gln Lys Met Gly Pro Ser Glu Ile
                    310
<210> 1924
<211> 310
<212> PRT
<213> Mus musculus
<400> 1924
Met Met Asn Cys Ser Gln Ala Pro Gly Phe Ile Leu Leu Gly Leu Ser
                                    10
Ser Asn Ser Glu Lys Trp Gln Pro Leu Phe Ser Ile Phe Leu Val Leu
                                25
Tyr Leu Leu Gly Leu Leu Gly Asn Leu Leu Leu Leu Ala Ile Gly
```

40 Thr Asp Val His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser Leu Val Asp Leu Cys Phe Ile Thr Thr Thr Ala Pro Lys Met Leu 70 Glu Thr Leu Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu 90 95 Thr Gln Leu Tyr Phe Phe Ala Val Phe Ala Asp Met Asp Asn Leu Leu 100 105 Leu Ala Val Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys His Pro Leu 120 Leu Tyr Pro Leu Leu Met Thr Pro Cys Arg Cys Arg Val Leu Val Ser 135 140 Gly Ser Trp Gly Val Ala His Cys Val Ser Leu Thr His Ile Leu Leu 150 155 Leu Ser Gln Leu Tyr Phe His Thr Asn Gln Glu Ile Pro His Phe Phe 165 170 Cys Asp Phe Gly Pro Leu Leu Leu Ser Cys Ser Asp Ala His Leu 180 185 Asn Glu Ser Leu Met Met Ala Leu Ala Gly Val Leu Gly Ile Ser Ala 195 200 205 Leu Leu Cys Ile Val Ser Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala 215 220 Lys Val Pro Ser Ala Gln Gly Lys Arg Lys Ala Leu Ala Thr Cys Ser 230 235 240

```
Ser His Leu Ser Val Val Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr
Tyr Leu Lys Pro Pro Ser Ser Ser Arg Ser Ser Gly Glu Val Val Ala
                                265
Ala Val Met Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Val Lys Ser Ser Leu Arg Arg Ile Leu Asn
Met Val Lys Ser Gln Asp
<210> 1925
<211> 309
<212> PRT
<213> Mus musculus
<400> 1925
Met Asn Cys Ser Lys Ala Pro Gly Phe Ile Leu Leu Gly Leu Ser Ser
                                    10
Asp Pro Glu Lys Trp Gln Pro Leu Phe Asn Ile Phe Leu Cys Leu Tyr
                                25
Leu Leu Gly Leu Leu Gly Asn Leu Leu Leu Leu Ala Ile Gly Thr
                            40
Asp Val His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser
                        55
Leu Val Asp Leu Cys Phe Ile Thr Thr Thr Ala Pro Lys Met Leu Glu
                                        75
Ala Leu Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu Thr
               85
                                    90
Gln Phe Tyr Phe Phe Ala Val Phe Ala Asp Met Asp Asn Leu Leu Leu
           100
                                105
                                                   110
Ala Val Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys His Pro Leu Phe
       115
                            120
                                               125
Tyr Pro Phe Leu Met Thr Pro Cys Arg Cys Glu Val Leu Ala Ser Gly
                       135
                                            140
Ser Trp Gly Ile Ala His Cys Val Ser Leu Phe Tyr Thr Leu Leu Leu
                   150
                                       155
Ser Gln Phe Tyr Tyr His Thr Asn Gln Gly Ile Pro His Phe Phe Cys
               165
                                   170
Asp Ser Arg Pro Leu Leu Leu Ser Cys Ser Asp Thr His Leu Ser
           180
                                185
                                                   190
Glu Gly Leu Met Met Ala Leu Ser Gly Val Leu Gly Met Ser Ser Val
                            200
                                                205
Leu Cys Leu Val Ser Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala Arg
```

215 220 Val Pro Ser Ala Gln Gly Lys Arg Lys Ser Leu Ala Thr Cys Ser Ser 230 235 His Leu Ser Val Val Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr Tyr 250 Leu Lys Pro Pro Ser Thr Ser His Ser Ser Ala Glu Val Val Ala Ala 260 265 Val Met Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Ser 280 Leu Arg Asn Lys Asp Val Lys Ser Ser Leu Arg Lys Ile Leu Asn Met 295

300

Asp Lys Phe Gln Gly

```
<211> 309
<212> PRT
<213> Mus musculus
<400> 1926
Met Asn Cys Ser Gln Ala Pro Thr Phe Ile Leu Leu Gly Leu Ser Ser
Asp Ala Glu Lys Trp Gln Pro Leu Phe Ser Ile Phe Leu Val Leu Tyr
                                25
Leu Leu Gly Leu Leu Gly Asn Leu Leu Leu Leu Ala Ile Gly Thr
Asp Val His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser
                        55
Leu Val Asp Leu Cys Phe Ile Thr Thr Thr Ala Pro Lys Met Leu Glu
                    70
                                        75
Ala Leu Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu Thr
                8.5
                                    90
Gln Leu Tyr Phe Phe Ala Val Phe Ala Asp Met Asp Asn Leu Leu Leu
            100
                                105
Ala Val Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys His Pro Leu Leu
                            120
        115
                                                 125
Tyr Pro Leu Leu Met Thr Pro Cys Arg Cys Arg Val Leu Val Ser Gly
                        135
                                            140
Ser Trp Gly Val Ala His Cys Val Ser Leu Thr His Thr Leu Leu Phe
145
                    150
                                        155
Ser Lys Leu Tyr Phe His Asn Asn Gln Glu Ile Pro His Phe Phe Cys
                165
                                    170
Asp Phe Gly Pro Leu Leu Leu Ser Cys Ser Asp Thr Tyr Leu Asn
            180
                                185
                                                     190
Glu Ser Leu Met Met Ala Leu Ser Gly Leu Leu Ala Ile Ser Ala Phe
        195
                            200
Leu Cys Ile Val Ser Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala Lys
                        215
                                             220
Val Pro Ser Ala Gln Gly Lys Arg Lys Ala Leu Ala Thr Cys Ser Ser
                    230
                                        235
His Leu Ser Val Val Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr Tyr
                245
                                    250
Leu Lys Pro Pro Ser Ser Ser His Ser Ser Gln Glu Val Val Ala Ala
            260
                                265
Val Met Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Ser
                            280
Leu Arg Asn Lys Asp Val Lys Ser Ser Leu Arg Arg Ile Leu Asn Met
                        295
                                             300
Val Lys Ser Gln Asp
305
<210> 1927
<211> 310
<212> PRT
<213> Mus musculus
<400> 1927
Met Ser Gly Val Ser Glu Asn Gln Thr Thr Trp Leu Thr Leu Val Gly
                                    10
Phe Gly Lys Leu Lys His Leu Gly Phe Leu Pro Phe Ala Leu Phe Leu
            20
                                25
```

```
Ala Ile Tyr Val Ala Thr Val Gly Gly Asn Ile Leu Ile Val Leu Ala
Val Ala Ser Ser Arg Thr Leu His Thr Pro Met Tyr Phe Phe Leu Cys
                        55
His Phe Ser Leu Leu Glu Ile Gly Tyr Thr Ser Asn Ile Val Pro Arg
Leu Leu Gln Ser Phe Leu Glu Gly Gly Asp Leu Ile Ser Leu Val Gly
                                    90
Cys Leu Ala Gln Phe Tyr Val Phe Ala Ser Leu Ala Ala Ala Glu Cys
                                105
Leu Met Leu Ser Ala Met Ser Tyr Asp Arg Tyr Leu Ala Ile Cys His
                            120
Pro Leu His Tyr Pro Val Leu Met Ser Thr Trp Cys Cys Val Arg Leu
                        135
                                            140
Ala Thr Gly Ala Trp Phe Ser Gly Phe Phe Phe Ser Ala Phe Thr Leu
                    150
                                        155
Ala Leu Ala Ala Pro Leu Ser Leu Cys Pro Gly Arg Arg Val Ile Asp
                165
                                    170
His Tyr Phe Cys Asp Phe Ala Pro Val Val Gly Leu Phe Cys Gly Glu
                                185
                                                    190
Val Trp Val Met Trp Gly Ala Gly Val Ser Ile Ser Gly Cys Leu Thr
                            200
Leu Ala Pro Phe Leu Leu Ile Val Ala Ser Tyr Val Phe Ile Leu Arg
                        215
Ala Val Leu Arg Ile Pro Ser Ser His Gly Arg Gln Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ser Ser His Leu Ser Val Val Ala Val Phe Tyr Gly Thr Leu
                                    250
Ile Val Val Tyr Val Ala Pro Thr Glu His Met Pro Ala Leu Leu Arg
                                265
Lys Ala Phe Ser Val Phe Tyr Thr Val Leu Thr Pro Met Phe Asn Pro
                            280
Ile Ile Tyr Ser Leu Lys Asn Gln Glu Val Lys Trp Ala Leu Arg Arg
Leu Cys Arg Gln Leu Leu
305
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1928

 Met
 Arg
 Asn
 Arg
 Ser
 Val
 Val
 Thr
 Gln
 Phe
 Ile
 Leu
 Leu
 Gly
 Ile
 Pro

 Asn
 Thr
 Glu
 Gly
 Leu
 Glu
 Thr
 Met
 Leu
 Phe
 Val
 Leu
 Phe
 Leu
 Ser
 Phe
 Asn
 Leu
 Leu
 Phe
 Leu
 Leu
 Asn
 Leu
 Leu
 Leu
 Leu
 Leu
 Asn
 Leu
 Leu

```
115
                            120
Arg Tyr Ser Ile Ile Met Ser His Arg Val Cys Ala Ile Leu Ala Thr
                        135
                                            140
Gly Thr Ser Phe Phe Gly Cys Ile Gln Ala Thr Phe Leu Thr Thr Leu
                                        155
                    150
Thr Phe Gln Leu Pro Tyr Cys Gly Pro Asn Glu Val Asp Tyr Tyr Phe
                165
                                    170
Cys Asp Ile Pro Val Met Leu Lys Leu Ala Cys Ala Asp Thr Ser Ala
                                185
Leu Glu Met Val Gly Phe Ile Ser Val Gly Leu Met Pro Leu Ser Cys
                            200
Phe Leu Leu Ile Leu Thr Ser Tyr Ser Cys Ile Val Cys Ser Ile Leu
                        215
Gln Ile Arg Ser Ala Glu Gly Arg Arg Arg Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ala His Leu Thr Ala Ile Leu Leu Phe Tyr Met Pro Val Val Leu Ile
                                    250
Tyr Leu Arg Pro Thr Pro Ser Pro Trp Leu Asp Ala Thr Val Gln Val
                                265
Leu Asn Asn Leu Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu
                            280
Arg Asn Lys Glu Val Lys Ala Ser Leu Trp Lys Val Leu Arg Lys Pro
                        295
Ala Phe Ala Pro Glu Gln Leu
<210> 1929
<211> 311
<212> PRT
<213> Mus musculus
<400> 1929
Met Ala Ala Gly Asn His Cys Thr Val Thr Glu Phe Phe Leu Val Gly
                                    10
Leu Ser Glu Lys Pro Glu Phe Gln Leu Pro Leu Phe Leu Leu Phe Leu
                                25
Gly Ile Tyr Leu Ile Thr Val Thr Gly Asn Val Gly Met Ile Thr Leu
                            40
Ile Gly Leu Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Val Arg
                        55
                                            60
Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Val Ile Pro Lys
                    70
                                        75
Met Leu Met Ser Phe Leu Thr Glu Lys Asn Ile Ile Ser Tyr Ser Gly
                                    90
Cys Met Val Gln Leu Tyr Phe Phe Phe Ile Phe Gly Ile Ala Glu Cys
                                105
Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
```

120

150

180

Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Tyr Asn Ser Leu

Ile Ser Gly Ser Tyr Ile Phe Ala Val Val Cys Ser Ser Leu Ile Thr

Gly Phe Met Phe Arg Ile Gln Phe Cys Asn Leu Asp Val Ile Asn His

Tyr Phe Cys Asp Leu Leu Pro Leu Leu Asn Leu Ala Ser Ser Asn Ile

185 Tyr Ile Asn Glu Ile Leu Ile Leu Val Ile Ala Thr Leu Asn Val Phe 200

125

140

155

```
      Ile
      Pro
      Val
      Met
      Thr
      Ile
      Ile
      Thr
      Ser
      Tyr
      Ile
      Phe
      Ile
      Ile
      Ala
      Thr

      210
      Tyr
      Ile
      His
      Ser
      Ser
      Glu
      Gly
      Lys
      Phe
      Lys
      Gly
      Phe
      Ser
      Thr

      11e
      Leu
      Tyr
      Ile
      Ser
      Ala
      Val
      Ala
      Ile
      Phe
      Tyr
      Gly
      Ser
      Gly
      Ala

      12e
      Tyr
      Leu
      Gly
      Phe
      Ala
      Ile
      Phe
      Phe
      Tyr
      Gly
      Ser
      Gly
      Ala
      Lys
      Lys
      Lys
      Lys
      Lys
      Lys
      Ile
      Lys
      Lys
      Ile
      Ile
      Ile
      Phe
      Met
      Lys
      Lys
      Ile
      I
```

<210> 1930 <211> 319 <212> PRT <213> Mus musculus

<400> 1930

Met Glu Asp Met Thr Ser Gly Asn Asn Cys Thr Val Ser Glu Phe Phe Leu Ala Gly Leu Ser Glu Glu Pro Glu Leu Gln Leu Pro Leu Phe Leu 25 Leu Phe Thr Gly Ile Tyr Leu Ile Thr Val Val Gly Asn Leu Gly Met Ile Thr Leu Ile Gly Ile Ser Ser His Leu His Thr Ala Met Tyr Phe 55 Phe Leu Ser Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Val 75 70 Thr Pro Lys Met Leu Val Ser Phe Leu Thr Glu Lys Asn Ile Ile Ser Tyr Leu Gly Cys Met Ala Gln Leu Tyr Phe Phe Ile Ile Phe Gly Ala 105 Ala Glu Cys Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala 115 120 125 Ile Cys Asn Pro Leu Leu Tyr Thr Val Val Met Ser Tyr Gln Val Tyr 130 135 140 Ser Ser Leu Ile Ser Gly Val Tyr Ile Tyr Ala Val Phe Cys Ala Ser 150 155 Val His Thr Gly Val Leu Thr Arg Ile Gln Phe Cys Lys Leu Asp Val 165 170 Ile Asn His Tyr Phe Cys Asp Ile Leu Pro Leu Leu Lys Leu Ala Cys 180 185 Ser Asn Thr Tyr Ile Asp Glu Met Leu Ile Leu Phe Phe Gly Thr Leu 195 200 Asn Ile Phe Ala Pro Thr Leu Ile Ile Ile Thr Ser Tyr Ile Phe Ile 215 220 Ile Ala Ser Ile Phe His Ile Arg Ser Arg Glu Gly Arg Ser Lys Ala 230 235 Phe Ser Thr Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Tyr Gly 245 250 Ser Ala Ala Phe Met Tyr Leu Gln Pro Ser Arg Val Asn Ser Met Asp 260 265 270 Gln Gly Lys Val Ser Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu 280 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Thr Val Ala Leu

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Lys Lys Ile Leu Glu Arg Lys Asn Phe Met Trp Ser Glu Val Thr
                   310
<210> 1931
<211> 310
<212> PRT
<213> Mus musculus
<400> 1931
Met Asp Asn Tyr Thr Leu Leu Asn Glu Phe Ile Leu Leu Gly Ile Pro
1 5
                                   10
Gln Thr Gln Gly Leu Glu Thr Leu Leu Phe Val Val Phe Leu Phe Ile
           20
                               25
Tyr Phe Phe Thr Leu Leu Gly Asn Ser Leu Ile Phe Thr Ala Ile Ile
       35
                           40
                                              45
Ser Ser Ser Thr Leu His Thr Pro Met Tyr Phe Phe Leu Gly Leu Leu
                       55
Ser Val Phe Asp Met Leu Phe Pro Ser Val Thr Cys Pro Lys Met Leu
                   70
                                    75
Phe Tyr Leu Ser Val Arg Ser Pro Ala Ile Ser Tyr Lys Gly Cys Ala
             85
                                   90
Ala Gln Leu Phe Phe Tyr His Leu Leu Gly Ser Thr Glu Gly Cys Leu
        100
                               105
                                                  110
Tyr Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu
                          120
                                             125
       115
Arg Tyr Met Leu Ile Met Lys Pro Gly Val Cys Val Ser Leu Val Ile
   130
                      135
                                          140
Ile Ala Trp Leu Val Gly Cys Leu His Ala Thr Ile Leu Thr Ser Leu
                   150
                                      155
Thr Phe Gln Leu Val Tyr Cys Ala Ser Asn Gln Val Asp Tyr Phe Phe
                                   170
                                                      175
               165
Cys Asp Leu Pro Ala Val Leu Pro Leu Ala Cys Thr Asp Ser Lys Leu
   180
                               185
                                                  190
Ala Arg Lys Val Gly Ser Ile Asn Val Gly Phe Leu Ala Leu Met Leu
       195
                           200
Leu Phe Ser Val Cys Val Ser Tyr Val His Ile Gly Val Ala Ile Leu
                       215
                                          220
Arg Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe Ser Thr Cys Ser
                   230
                                       235
Ala His Leu Thr Ala Ile Leu Cys Ala Tyr Gly Pro Val Ile Ile Ile
                                   250
               245
Tyr Leu Gln Arg Thr Pro Asn Pro Leu Leu Gly Ala Val Val Gln Ile
       260
                               265
Leu Asn Asn Ile Val Ser Pro Met Leu Asn Ser Leu Ile Tyr Ser Leu
                           280
Arg Asn Lys Glu Val Lys Arg Ser Leu Arg Arg Val Phe Gln Asn Ile
                     295
Thr Phe His Gly Gln Lys
<210> 1932
<211> 314
<212> PRT
<213> Mus musculus
<400> 1932
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295

300

```
Met Thr Asn His Thr Met Val Thr Glu Phe Thr Leu Leu Gly Ile Pro
Glu Thr Glu Gly Leu Glu Asn Ala Leu Leu Phe Leu Phe Ser Thr Met
                                25
Tyr Ala Cys Ala Leu Leu Gly Asn Phe Leu Ile Leu Thr Ala Ile Thr
                            40
Thr Ser Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu
Ser Ile Phe Asp Leu Gly Phe Cys Ser Thr Thr Ala Pro Lys Met Leu
                                        75
Ser Tyr Leu Ser Gly Trp Gly Gly Gly Ile Ser Phe Gln Gly Cys Val
                85
Val Gln His Phe Phe Tyr His Cys Leu Gly Cys Thr Leu Cys Phe Leu
            100
                                105
                                                    110
Tyr Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Phe Pro Leu
                            120
                                                125
        115
Arg Tyr Thr Ile Ile Met Asn His Arg Val Cys Cys Val Leu Ala Thr
   130
                        135
                                           140
Gly Thr Trp Met Ser Gly Cys Val His Ala Thr Ile Leu Thr Ser Leu
                    150
                                        155
Thr Phe Gln Leu Pro Tyr Cys Gly Pro Ser Glu Val Ser Tyr Tyr Phe
                                    170
                                                        175
               165
Cys Asp Met Pro Ala Val Leu Leu Leu Ala Cys Glu Asp Ser Ser Leu
                                185
                                                    190
            180
Ala Gln Arg Val Gly Phe Thr Asn Val Gly Leu Leu Ser Leu Ile Cys
                            200
       195
Phe Phe Leu Ile Ile Val Ser Tyr Thr Arg Ile Gly Ile Ser Ile Ser
                        215
                                            220
Lys Ile Arg Ser Thr Glu Gly Arg Gln Arg Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ala His Leu Thr Ala Ile Met Cys Val Tyr Gly Pro Val Ile Val Ile
                                    250
                245
Tyr Leu Gln Pro Asn Pro Ser Pro Leu Leu Ser Ala Ile Ile Gln Ile
                                265
            260
Leu His Asn Leu Val Thr Pro Thr Ile Asn Pro Leu Ile Tyr Ser Leu
                            280
                                                285
Arg Asn Lys Asp Val Lys Ala Ala Leu Arg His Val Phe Leu Lys Arg
                        295
Cys Leu Ser Leu Glu Val Asn Glu Asn Ser
                    310
```

```
<210> 1933
```

<400> 1933

```
      Met Glu Glu Leu Asn His Thr Pro Val Ala Glu Phe Ile Leu Ala Gly

      1
      5

      Leu Thr Glu Asn Pro Glu Leu Gln Leu Pro Leu Phe Leu Ile Phe Leu

      20
      25

      Ser Val Tyr Leu Phe Thr Val Val Gly Asn Leu Gly Met Ile Val Leu

      35
      40

      Ile Leu Ile Ser Ser Gln Leu His Thr Pro Met Tyr Tyr Leu Leu Ser

      50
      55

      Ser Leu Ser Phe Ile Asp Cys Cys Gln Ser Thr Val Ile Val Pro Lys

      65
      70

      Met Leu Leu Asn Phe Val Thr Glu Lys Asn Val Ile Leu Tyr Pro Glu
```

<211> 314

<212> PRT

<213> Mus musculus

```
90
Cys Ile Ala Gln Phe Tyr Phe Phe Cys Thr Phe Val Val Ala Lys Cys
                                105
His Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Asn
                            120
Pro Leu Leu Tyr Lys Val Thr Met Ser Tyr Gln Val Cys Leu Leu Met
                        135
Val Ala Val Val Tyr Gly Ile Gly Leu Ile Ser Ala Thr Ala His Thr
                    150
                                        155
Val Phe Leu Leu Arg Leu Phe Phe Cys Lys Ala Asp Lys Ile Asn His
               165
                                    170
Tyr Phe Cys Asp Leu Phe Pro Leu Leu Glu Leu Ser Cys Ser Ser Thr
           180
                                185
                                                    190
Phe Ile Asn Glu Ile Leu Ala Leu Ser Phe Ser Ala Phe Asn Ile Ile
        195
                            200
Val Pro Ala Met Thr Ile Ile Gly Ser Tyr Ile Phe Ile Ile Ile Ser
                        215
Ile Leu His Ile Lys Ser Ser Gly Gly Arg Val Lys Ala Phe Ser Thr
                    230
                                        235
Tyr Ser Ser His Ile Leu Ala Val Ala Ile Phe Phe Gly Ser Thr Thr
                245
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Trp Lys
            260
                                265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Val Leu Asn Leu Met
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Lys Met Leu
                        295
Leu Gln Lys Met Phe Pro Gln Asn Lys Glu
                    310
```

<211> 310

<212> PRT

<213> Mus musculus

<400> 1934

Met Ser Asn Tyr Thr Gly Gln Phe Ser Asp Phe Thr Leu Val Gly Phe 10 15 Phe Ser Gln Ser Lys His Pro Ala Leu Leu Ala Val Val Ile Phe Val 25 Val Phe Leu Met Ala Leu Ser Gly Asn Thr Leu Leu Ile Leu Leu Ile 40 Leu Ser Asp Thr His Leu His Thr Pro Met Tyr Phe Phe Ile Ser Gln 55 Leu Ser Leu Met Asp Met Met Tyr Ile Ser Val Thr Val Pro Lys Met 70 75 Leu Met Asp Gln Val Leu Gly Asn His Lys Ile Ser Ala Ala Ala Cys 90 Gly Met Gln Met Phe Leu Tyr Leu Ser Ile Gly Gly Ser Glu Phe Leu 100 105 110 Leu Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro 120 125 Leu Arg Tyr Pro Val Leu Met Asn His Arg Ile Cys Leu Leu Leu 135 140 Ser Val Cys Trp Leu Leu Gly Ser Leu Asp Gly Phe Met Leu Thr Pro 150 155 Val Thr Met Thr Phe Pro Ile Cys Gly Ser Arg Glu Ile His His Phe 170

```
Phe Cys Glu Val Pro Ala Val Thr Lys Leu Ser Cys Ser Asp Thr Trp
Leu Tyr Glu Thr Leu Met Tyr Val Cys Cys Val Leu Met Ile Leu Ile
       195
Pro Val Thr Val Ile Ser Gly Ser Tyr Ser Ser Ile Leu Leu Thr Val
                        215
Leu Arg Met Asn Ser Ala Glu Gly Arg Lys Lys Ala Leu Ala Thr Cys
                                        235
                    230
Ser Ser His Met Thr Val Val Thr Leu Phe Tyr Gly Ala Ala Val Tyr
                                    250
Thr Tyr Met Leu Pro Ala Ser Leu His Thr Pro Glu Lys Asp Met Val
                                265
Val Ser Val Phe Tyr Thr Ile Val Thr Pro Leu Leu Asn Pro Leu Ile
                            280
Tyr Ser Phe Arg Asn Lys Asn Val Thr Glu Ala Met Lys Lys Leu Leu
Gly Val Ser Ile Pro His
```

<210> 1935 <211> 306 <212> PRT

<213> Mus musculus

<400> 1935

Met Glu Ser Gly Asn His Ser Cys Gly Thr Glu Phe Thr Leu Val Gly 1.0 Leu Phe Gln Tyr Gly His Met Asp Thr Phe Leu Phe Thr Leu Ile Ala 20 Ile Leu Phe Ala Val Ala Leu Met Gly Asn Ile Thr Leu Val Leu Leu 40 Ile Arg Leu Asp Arg Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Gln Leu Ser Ile Ile Asp Met Met Tyr Ile Ser Thr Thr Val Pro Lys 70 75 Met Ala Ala Asn Phe Leu Ser Asp Thr Lys Ala Ile Ser Phe Leu Gly 85 90 Cys Ala Val Gln Thr Phe Val Phe Leu Thr Leu Gly Gly Ser Glu Ala 100 105 Leu Leu Gly Phe Met Ser Tyr Asp Arg Tyr Ile Ala Ile Cys Gln 120 Pro Leu His Tyr Pro Val Leu Met Ser Arg Lys Ile Cys Cys Ser Met 135 140 Val Ala Gly Ala Trp Ser Ser Ser Ile Asn Ala Phe Met His Thr 150 155 Val Tyr Val Phe Gln Leu Pro Phe Cys Gly Ser Arg Met Val Asn His 170 165 Phe Phe Cys Glu Val Pro Ser Leu Leu Pro Leu Val Cys Glu Asp Thr 180 185 Ser Gln Tyr Glu His Thr Val Leu Val Ser Gly Leu Val Ile Leu Leu 195 200 Leu Pro Phe Leu Ala Ile Leu Ala Ser Tyr Ala Arg Val Leu Val Val 215 220 Val Leu Gln Met Gly Ser Gly Lys Gly Gln Ser Arg Ala Val Ser Thr 230 235 Cys Ser Ser His Leu Thr Val Ala Ser Leu Phe Tyr Val Thr Thr Leu 250 Ser Thr Tyr Thr Gln Pro His Ser Leu His Ser Pro Gly Arg Asp Lys

```
260
                                265
Val Val Ala Val Leu Tyr Ser Ile Val Thr Pro Val Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Met Gly Ala Leu Arg Arg Gln
   290
                        295
Arg Gly
305
<210> 1936
<211> 306
<212> PRT
<213> Mus musculus
<400> 1936
Met Glu Thr Gly Asn His Ser Cys Gly Thr Asp Phe Thr Leu Val Gly
                                    10
1
Leu Phe Gln Tyr Gly His Met Asp Thr Phe Leu Phe Thr Val Ile Ser
            20
                                25
Ile Leu Phe Ala Val Ala Leu Ile Gly Asn Ile Thr Leu Val Leu Leu
                            40
                                                 45
Ile Arg Leu Asp Arg Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Gln Leu Ser Ile Ile Asp Met Met Cys Ile Ser Thr Thr Val Pro Lys
                    70
                                        75
Met Gly Ala Asn Phe Leu Ser Asp Thr Lys Ala Ile Ser Val Leu Gly
                                    90
                85
Cys Glu Ile Gln Val Phe Met Phe Met Ser Leu Ala Gly Cys Glu Ala
            100
                                105
                                                    110
Leu Leu Gly Phe Met Ser Tyr Asp Arg Tyr Ile Ala Ile Cys Gln
                            120
Pro Leu His Tyr Pro Val Leu Met Ser Arg Lys Ile Cys Cys Ser Met
                        135
                                            140
Val Ala Ser Ala Trp Ser Ser Ser Ser Ile Asn Ala Leu Ala His Thr
                    150
                                        155
Val Tyr Val Phe Gln Leu Pro Phe Cys Gly Ser Arg Met Val Asn His
                                    170
                                                        175
                165
Phe Phe Cys Glu Val Pro Ser Leu Leu Pro Leu Val Cys Glu Asp Thr
           180
                                185
                                                    190
Ser Gln Tyr Glu His Met Ile Val Met Ser Val Leu Val Leu Val Leu
        195
                            200
Leu Pro Phe Leu Ala Ile Leu Ala Ser Tyr Ala Arg Val Leu Val Val
                        215
                                            220
Val Phe Gln Met Gly Ser Gly Lys Gly Gln Ser Arg Ala Val Ser Thr
                    230
                                        235
Cys Ser Ser His Leu Thr Val Ala Ser Leu Phe Tyr Val Thr Gly Leu
                245
                                    250
Cys Thr Tyr Thr Gln Pro His Ser Leu His Ser Pro Gly Arg Asp Lys
                                265
Val Val Ala Val Leu Tyr Ser Ile Val Thr Pro Val Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Gly Ala Leu Arg Arg Gln
   290
                        295
Met Gly
305
```

<400> 1937 Met Ala Phe Leu His Asn Gly Asn His Thr Ala Val Thr Glu Phe Ile 10 Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Ile Val Leu Phe Thr 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr 40 Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Ser Ala Asp Ile Gly Tyr Ser Ser Val 70 75 Thr Pro Asn Met Leu Val Asn Phe Leu Val Lys Gln Asn Thr Ile Ser 85 90 Tyr Ile Gly Cys Ser Ile Gln Phe Gly Ser Ala Ala Phe Phe Gly Gly 100 105 110 Leu Glu Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala 120 125 Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys 130 135 140 Val Gln Leu Val Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser 150 155 Phe Ala Thr Val Ser Phe Leu Phe Leu Phe Phe Cys Gly Pro Asn Ile 165 170 Ile Asn His Phe Phe Cys Asp Phe Ala Pro Leu Ile Glu Leu Ser Cys 180 185 190 Ser Asp Val Arg Ile Ser Val Leu Val Thr Ser Phe Ser Ala Gly Thr 195 200 205 Val Thr Met Leu Thr Val Leu Val Ile Ala Ile Ser Tyr Thr Tyr Ile 215 220 Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg His Lys Ala 230 235 Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Ser Leu Phe Tyr Gly 245 250 255 Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Arg Tyr Ser Thr Asp 260 265 270 Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu 275 280 285 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu 295 300 Arg Arg His Leu Gly Lys Lys Ile Phe Ser Gln Ser Asn Ile Leu Phe 305 310 315 Tyr

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<210> 1938
<211> 314
<212> PRT
```

<213> Mus musculus

<400> 1938

Met Ala Phe Leu Glu Asn Gly Asn His Thr Ala Val Ser Glu Phe Ile 1 5 10 15 Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Ile Val Leu Phe Thr 20 25 30 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr

```
40
Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe
                        55
Phe Leu Ser His Leu Ala Ser Ala Asp Ile Gly Leu Ser Ser Val
                    70
                                        75
Thr Pro Asn Met Leu Val Asn Phe Leu Val Glu Arg Ser Thr Ile Ser
Tyr Leu Gly Cys Gly Ile Gln Leu Ser Ser Ala Ala Leu Phe Gly Ala
            100
                                105
Thr Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Met Ala
        115
                            120
                                                125
Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Lys Val Cys
                        135
Val Gln Leu Ile Val Gly Ser Tyr Ile Ala Gly Phe Leu Asn Ala Ser
                    150
                                        155
Ser Phe Leu Leu Ser Phe Phe Ser Leu Leu Phe Cys Gly Gln Asn Ile
                165
                                    170
Ile Asn Asp Phe Phe Cys Asp Phe Ala Pro Leu Ala Glu Leu Ser Cys
                                185
Ser Asp Val Ser Val Phe Val Val Val Ile Ser Phe Ser Ala Gly Thr
        195
                            200
                                                205
Val Thr Met Leu Thr Val Phe Val Ile Ala Ile Ser Tyr Ser Tyr Ile
                        215
Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly
                245
                                    250
Thr Val Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Met Asp
                                265
Gln Asn Lys Ile Ile Ser Val Phe Tyr Met Val Val Pro Met Leu
        275
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu
                        295
Lys Arg His Phe Asp Arg Lys Thr Phe Ser
                    310
<210> 1939
<211> 314
<212> PRT
<213> Mus musculus
<400> 1939
Met Ala Phe Leu Glu Asp Gly Asn His Thr Ala Val Thr Glu Phe Ile
Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Val Ile Leu Phe Thr
                                25
Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr
                            40
Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe
Phe Leu Ser His Val Gly Ser Val Asp Ile Gly Tyr Ser Ser Ser Val
```

Thr Pro Asn Met Leu Val Asn Phe Leu Val Glu Lys His Thr Ile Ala

Tyr Leu Gly Cys Gly Ile Gln Leu Ser Ser Ala Ala Phe Phe Gly Thr

120

105 Ala Glu Cys Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Val Ala

75

125

90

70

100

```
Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Thr Cys
                        135
Ile Gln Leu Val Val Gly Ser Tyr Thr Gly Gly Ile Leu Asn Ala Ser
                    150
                                        155
Phe Ala Ile Ile Ser Phe Phe Ser Phe Leu Phe Cys Gly Pro Asn Arg
                                    170
Ile Asn His Phe Tyr Cys Asp Phe Ala Pro Leu Val Glu Leu Ser Cys
           180
                                185
Ser Asp Ile Asn Val Ser Val Val Ile Thr Thr Ile Phe Ser Ala Ser
       195
                            200
Val Thr Ile Ile Thr Val Phe Val Ile Ala Ile Ser Tyr Thr Tyr Ile
                        215
Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg His Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ser Tyr Leu Thr Ala Val Thr Leu Phe Tyr Gly
                245
                                    250
Thr Val Thr Phe Ile Tyr Val Val Pro Lys Ser Asn Tyr Ser Thr Asp
                                265
Gln Asn Lys Val Ala Ser Val Phe Tyr Ile Val Val Ile Pro Met Leu
       275
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Asp Ile Lys Gly Ala Leu
                       295
Lys Arg Gln Leu Gly Lys Lys Thr Phe Ser
```

<210> 1940 <211> 314 <212> PRT

<213> Mus musculus

<400> 1940

Met Ala Phe Ile Tyr Asn Gly Ser Gln Thr Thr Val Thr Glu Phe Ile 10 Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Lys Val Ile Leu Phe Cys 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Phe Gly Asn Leu Ser Thr . 40 4.5 Ile Leu Leu Ile Gly Val Ser Ser Lys Leu His His Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Ser Val Asp Met Gly Leu Ser Ser Ser Val 75 70 Thr Pro Asn Met Leu Val Asn Phe Leu Thr Glu Lys Asn Thr Ile Ser 90 Tyr Leu Gly Cys Gly Ile Gln Leu Ser Ser Ala Ala Phe Phe Gly Ala 100 105 110 Val Glu Phe Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Leu Val Ala 115 120 125 Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Ser Gln Val Cys 135 140 Ile Gln Leu Val Ala Gly Ser Tyr Val Gly Gly Phe Leu Asn Ala Ser 150 155 Phe Val Thr His Phe Phe Phe Ser Phe Leu Phe Cys Gly Pro Asn Arg 170 Val Asn His Phe Phe Cys Asp Leu Ser Pro Met Met Glu Leu Ser Cys 185 190 Ser Asp Val Ser Ile Ser Glu Ile Val Ile Ser Phe Ser Ala Gly Ser 200 Phe Thr Met Thr Thr Leu Phe Val Ile Val Ile Pro Tyr Phe Tyr Ile

```
210
                        215
                                            220
Phe Ile Thr Ile Leu Lys Ile Arg Ser Thr Glu Gly Arg Gln Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly
                                    250
                245
Thr Ile Ile Phe Ile Tyr Val Met Pro Lys Ser Thr Tyr Ser Arg Asp
                                265
                                                     270
Gln Asn Lys Val Val Ser Leu Phe Tyr Met Leu Val Ile Pro Val Leu
       275
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Asp Ala Leu
                        295
                                            300
Lys Arg Gln Phe Tyr Arg Lys Thr Leu Leu
                    310
<210> 1941
<211> 310
<212> PRT
<213> Mus musculus
<400> 1941
Met Asn Gly Gly Asn His Thr Ser Met Thr Glu Leu Phe Ile Leu Gly
Pro Thr Glu Asp Pro Thr Phe Cys Ile Ala Phe Phe Val Ile Phe Leu
Gly Val Tyr Met Val Thr Leu Val Gly Asn Ile Ser Ile Ile Thr Leu
        35
                            40
Ile Arg Ile Ser Ser Gln Leu His Thr Pro Val Tyr Leu Phe Leu Asn
                        55
His Leu Ala Phe Val Asp Ile Leu Tyr Ser Thr Leu Val Ser Val Ile
                    70
Met Leu Met Glu Leu Leu Glu His Glu Leu Ala Leu Pro Val Ala Ala
                                    90
Cys Ala Ala Glu Leu Cys Ile Thr Val Leu Phe Gly Ser Ser Glu Cys
            100
                                105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys Ser
                            120
                                                 125
Pro Leu Leu Tyr Ser Thr Leu Met Ser Ser Arg Val Cys Phe Leu Leu
                        135
                                            140
Leu Gly Met Ser Tyr Val Gly Gly Cys Met Asn Gly Trp Ile Phe Thr
                    150
                                        155
Gly Cys Leu Leu Asn Leu Ser Phe Tyr Gly Pro Tyr Gln Ile Asp His
                165
                                    170
Phe Phe Cys Asp Phe Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Val
            180
                                185
                                                     190
Ser Ile Ile Gly Ile Ile Pro Ser Ile Ser Ser Gly Ser Ile Ile Val
        195
                            200
Val Thr Val Leu Val Ile Ala Val Phe Tyr Ile Cys Ile Leu Met Thr
                        215
                                            220
Ile Leu Lys Met His Ser Thr Asp Gly Cys His Lys Ala Phe Ser Thr
                    230
Cys Asn Ser Tyr Leu Thr Ala Val Thr Leu Tyr Tyr Gly Thr Ile Thr
                245
                                    250
Phe Ile Tyr Val Met Pro Lys Ser Asn Tyr Ser Thr Glu Lys Asn Lys
                                                     270
                                265
Val Leu Ser Glu Phe Tyr Thr Val Val Ile Pro Met Leu Asn His Leu
                            280
Ile Tyr Ser Leu Lys Asn Arg Asp Val Lys Asp Ala Leu Arg Lys Ala
    290
                        295
                                            300
```

```
305
<210> 1942
<211> 308
<212> PRT
<213> Mus musculus
<400> 1942
Met Glu Ile Lys Asn Ser Ser Val Val Thr Glu Phe Ile Leu Leu Gly
Leu Thr Gln Ser Gln Glu Ala Gln Leu Leu Val Phe Ala Leu Ile Ser
                                25
Val Phe Tyr Leu Ile Ile Leu Pro Gly Asn Phe Leu Ile Ile Phe Thr
                            40
Ile Arg Ser Asp Ser Gly Leu Thr Ala Pro Leu Tyr Phe Phe Leu Gly
                        55
Asn Leu Ala Phe Leu Asp Ala Ser Tyr Ser Phe Ile Val Ala Pro Arg
                   70
Met Leu Val Asp Phe Phe Cys Glu Lys Lys Val Ile Ser Tyr Lys Ala
                                    90
               85
Cys Ile Thr Gln Leu Phe Phe Leu His Phe Leu Gly Ala Gly Glu Met
           100
                                105
Phe Leu Leu Val Val Met Ala Val Asp Arg Tyr Ile Ala Ile Cys Arg
                            120
Pro Leu Tyr Tyr Ser Thr Leu Met Asn Pro Arg Val Cys Tyr Ala Leu
                       135
                                            140
Leu Leu Ala Leu Trp Leu Gly Gly Phe Ala His Ser Ile Val Gln Val
                   150
                                        155
Ala Leu Ile Leu Asn Leu Pro Phe Cys Gly Pro Asn Gln Leu Asp Asn
                                    170
                                                        175
               165
Phe Phe Cys Asp Val Pro Gln Val Val Lys Leu Ala Cys Thr Asp Thr
           180
                                185
                                                   190
Phe Ala Val Glu Leu Leu Met Val Ser Asn Ser Gly Leu Leu Thr Leu
                            200
Leu Cys Phe Leu Gly Leu Leu Ala Ser Tyr Ala Val Ile Leu Tyr His
                       215
                                            220
Val Lys Gly His Ser Ser Glu Gly Lys Ser Lys Ala Ile Ser Thr Cys
                    230
                                        235
Thr Thr His Ile Ile Ile Val Phe Leu Met Phe Gly Pro Ala Ile Phe
               245
                                    250
Ile Tyr Thr Arg Pro Phe Gln Ala Leu Gln Ala Asp Lys Val Val Ser
                                265
           260
Leu Phe His Thr Val Ile Phe Pro Leu Met Asn Pro Val Ile Tyr Thr
                           280
Leu Arg Asn Gln Glu Val Lys Thr Ser Met Arg Lys Leu Leu Ser Gln
  290
                       295
Tyr Val Ile Cys
305
<210> 1943
<211> 318
<212> PRT
<213> Mus musculus
<400> 1943
```

Met Met Asn Val Ala Asn Lys Ser Val Val Thr Glu Phe Val Leu Leu

Ile Val Arg Val Tyr Thr

```
25
Ser Leu Phe Tyr Val Ala Thr Met Val Ser Asn Ser Met Ile Val Leu
                            40
Ile Val Ile Ser Asp Ser His Leu His Ser Ala Met Tyr Phe Leu Leu
Thr Asn Leu Ser Ile Ile Asp Met Ser Leu Ala Ser Phe Ala Thr Pro
                                        75
Lys Met Ile Ile Asp Tyr Leu Thr Asp His Lys Thr Ile Ser Phe Asp
                                    90
Gly Cys Ile Ala Gln Ile Phe Phe Leu His Leu Phe Thr Gly Thr Glu
            100
                                105
                                                     110
Ile Ile Leu Leu Met Ala Met Ser Phe Asp Arg Tyr Ile Ala Ile Cys
                            120
                                                 125
Lys Pro Leu Arg Tyr Ala Ser Ile Ile Ser Pro Gln Val Cys Ile Ala
                        135
                                            140
Phe Val Val Ser Ser Trp Ile Val Gly Thr Met His Ser Met Ser Gln
                    150
                                        155
Val Ile Phe Ala Leu Thr Leu Pro Phe Cys Gly Pro Asn Lys Ile Asp
                                    170
                165
Ser Phe Phe Cys Asp Leu Pro Val Val Phe Gln Leu Ser Cys Val Asp
                                185
                                                     190
Thr Tyr Val Leu Gly Leu Phe Met Ile Ser Thr Ser Gly Ile Ile Ala
        195
                            200
                                                 205
Leu Ser Cys Phe Ile Leu Leu Phe Asn Ser Tyr Ile Ile Val Leu Val
                        215
                                             220
Thr Ile Lys His His Ser Ser Lys Gly Ser Ser Lys Ala Leu Ser Thr
                    230
                                        235
Cys Thr Ala His Phe Ile Val Val Phe Met Phe Phe Gly Pro Cys Ile
                245
                                    250
Phe Ile Tyr Met Trp Pro Gln Asn Ser Phe Val Ile Glu Lys Ile Leu
            260
                                265
                                                     270
Ser Val Phe Tyr Thr Ile Phe Thr Pro Ile Met Asn Pro Val Ile Tyr
                            280
                                                 285
Thr Leu Arg Asn His Glu Val Asn Ser Ala Met Arg Lys Leu Arg Ser
                        295
Lys Phe Leu Asn Phe Ser Thr Glu Thr Pro Ser Tyr Ser Leu
305
<210> 1944
<211> 309
<212> PRT
<213> Mus musculus
<400> 1944
Met Asp Tyr Glu Asn Gly Ser Ala Val Thr Glu Phe Ile Leu Val Gly
Phe Ser Arg Asp Trp Gln Leu Gln Ile Phe Phe Phe Val Thr Phe Thr
            20
Leu Ile Tyr Gly Ala Thr Val Val Gly Asn Ile Leu Ile Ile Val Thr
        35
                            40
Val Ala Ala Asn Ser Ala Leu His Ser Pro Met Tyr Phe Leu Leu Gly
```

55

70

Asn Leu Ser Phe Leu Asp Met Cys Leu Ser Thr Val Thr Thr Pro Lys

Met Ile Thr Asp Leu Leu Ala Ala His Lys Ser Ile Ser Phe Gln Gly

75

90

Gly Leu Ser Asn Ser Trp Glu Leu Gln Ile Phe Phe Phe Ile Val Phe

```
Cys Met Val Gln Met Phe Phe Ser His Phe Phe Gly Gly Ala Glu Met
            100
                                105
Thr Leu Leu Ile Val Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys
                            120
                                                125
Pro Leu His Tyr Arg Ile Ile Met Ser His Arg Leu Leu Asn Arg Phe
                        135
                                            140
Ile Ile Leu Ser Trp Thr Ile Gly Phe Ile His Thr Met Ser Gln Met
                    150
Ala Leu Thr Val Asn Leu Pro Phe Cys Gly His Asn Ile Ile Asn Asn
                                    170
Ile Phe Cys Asp Leu Pro Leu Val Ile Lys Leu Ala Cys Ile Glu Thr
            180
                                185
                                                    190
Tyr Thr Leu Glu Leu Phe Val Ile Ala Asp Ser Gly Leu Leu Ser Phe
                            200
                                                205
Ile Ser Phe Phe Leu Leu Val Ser Tyr Thr Val Ile Leu Leu Ile
                        215
                                            220
Val Lys His Lys Ser Pro Gly Ser Leu Ser Lys Ala Leu Ser Thr Leu
                    230
                                        235
Ser Ala His Ile Ile Val Val Thr Leu Phe Phe Gly Pro Cys Ile Phe
                                    250
Ile Tyr Ala Trp Pro Phe Gly Ser Phe Ala Ser Asn Thr Thr Leu Ala
            260
                                265
Val Phe Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Ile Ile Tyr Thr
                            280
Leu Arg Asn Gln Glu Met Lys Lys Ala Met Arg Lys Leu Trp Asn Gln
   290
                        295
                                            300
Gln Val Ser Cys Arg
305
```

<211> 322

<212> PRT

<213> Mus musculus

<400> 1945

Met Ala Thr Ser Val His Arg Asn Gly Ser Leu Thr Pro Val Ser Leu Gln Gly Phe Val Leu Val Gly Phe Gly Gly Ser Ala Glu Thr Gln Ala Leu Leu Phe Ala Val Phe Leu Val Leu Tyr Val Val Thr Ile Leu Gly 40 Asn Leu Thr Met Ile Met Val Ile Thr Leu Asp Ala Arg Leu His Ser 55 Pro Met Tyr Phe Phe Leu Lys Asn Leu Ser Phe Val Asp Leu Cys Leu 70 75 Ser Ser Val Ile Ile Pro Asn Ala Leu Ala Asn Ile Phe Ser Ser Ser 90 Lys Thr Ile Ser Phe Ala Gly Cys Ala Thr Gln Phe Phe Phe Ser 100 105 Leu Leu Ala Ala Thr Glu Ala Val Leu Leu Ala Val Met Ala Tyr Asp 120 Arg Phe Met Ala Ile Cys Ser Pro Leu Arg Tyr Pro Val Thr Met Cys 135 140 Pro Met Thr Cys Ala Arg Leu Val Leu Gly Thr Phe Cys Val Ala Cys 150 155 160 Leu Asn Ser Ile Val Gln Thr Ser Leu Thr Phe Gln Leu Pro Phe Cys 170 Ser Ser Asn Tyr Ile Asp Tyr Phe Phe Cys Asp Val Pro Pro Leu Leu

```
180
                                185
Gln Leu Ala Cys Ala Ser Thr Ala Ile Asn Glu Leu Val Met Phe Gly
                            200
                                                 205
Ile Cys Gly Phe Ile Ile Val Cys Ala Val Phe Val Val Ile Ile Ser
                        215
Tyr Gly Tyr Ile Thr Val Thr Ile Leu Arg Met Arg Ser Gly Ser Gly
                    230
                                         235
Arg His Lys Val Phe Ser Thr Cys Gly Ser His Met Thr Ala Val Ser
                                    250
Leu Phe Tyr Gly Thr Gly Phe Val Ile Tyr Gly Gln Pro Gly Gly Val
                                                     270
                                265
Ala Ser Met Glu Gln Gly Lys Val Val Ser Thr Ile Tyr Thr Leu Val
                             280
Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val
                        295
                                             300
Lys Asp Ala Leu Arg Arg Leu Gly Gln Arg His Ser Leu Val Lys Glu
                    310
Ser Gly
```

<211> 323

<212> PRT

<213> Mus musculus

<400> 1946

Met Ala Ile Ala Val Tyr Arg Asn Gly Ser Leu Ser Ala Val Ser Leu Gln Gly Phe Val Leu Val Gly Phe Gly Gly Ala Glu Thr Gln Ala Leu Leu Phe Ala Val Phe Leu Val Leu Tyr Val Val Thr Ile Leu Gly Asn Leu Thr Met Ile Val Val Ile Thr Leu Asp Ala Arg Leu His Ser 5.5 Pro Met Tyr Phe Phe Leu Lys Asn Leu Ser Phe Val Asp Leu Cys Tyr Ser Ser Ala Ile Ala Pro Asn Ala Leu Ala Asn Phe Leu Ser Thr Ser 90 Lys Val Ile Ser Phe Glu Ala Cys Ala Thr Gln Leu Phe Phe Ser 100 105 110 Leu Leu Ala Thr Thr Glu Ala Phe Leu Leu Ala Val Met Ala Tyr Asp 120 125 Arg Phe Met Ala Ile Cys Ser Pro Leu Arg Tyr Pro Val Thr Met Cys 135 Pro Thr Thr Cys Thr Arg Leu Val Leu Gly Thr Tyr Cys Gly Gly Cys 150 155 Leu Asn Ser Ile Val Gln Thr Ser Leu Thr Phe Gln Leu Pro Phe Cys 170 Ser Ser Asn Arg Ile Asp His Phe Tyr Cys Asp Val Pro Pro Leu Leu 180 185 190 Gln Leu Ala Cys Ala Ser Thr Ala Leu Asn Glu Leu Phe Leu Phe Gly 200 205 Leu Cys Gly Phe Ile Ile Val Ser Thr Thr Leu Ala Val Leu Val Ser 210 215 220 Tyr Gly Tyr Ile Thr Val Thr Ile Leu Arg Met His Ser Gly Ser Gly 225 230 235 240 Arg His Lys Val Phe Ser Thr Cys Gly Ser His Met Met Ala Val Ser 245 250

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      Leu Phe Tyr Gly Thr Val Phe Val Met Tyr Ala Gln Pro Gly Ala Val 260

      Ala Ser Met Ala Gln Gly Lys Val Ile Ser Val Phe Tyr Thr Leu Val 275

      Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val 290

      Lys Asp Ala Leu Arg Arg Leu Gly Gln Arg His Ser Leu Val Lys Lys 305

      Gly Gly Lys
```

Gly Gly Lys <210> 1947 <211> 316 <212> PRT <213> Mus musculus <400> 1947 Met Met Thr Leu Ser Trp Glu Asn Gln Thr Val Ile Val Glu Phe Val Leu Arg Gly Phe Ser Ser Ile Leu Gln Leu Asn Ile Ser Leu Phe Ile 25 Met Phe Cys Ile Phe Tyr Ile Leu Thr Ile Ser Gly Asn Ile Leu Ile 40 45 Val Phe Leu Val Leu Cys Asn His Ala Leu His Thr Pro Met Tyr Phe 55 Phe Leu Val Asn Leu Ser Phe Leu Glu Val Cys Tyr Thr Ser Asn Ile Val Pro Lys Met Leu Leu Ile Ile Ile Ala Asp Gln Lys Thr Ile Ser Val Val Gly Cys Leu Ala Gln Phe Tyr Phe Phe Gly Ser Leu Ala Ala 100 105 110 Thr Glu Cys Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Leu Ala 120 125 Ile Cys Gln Pro Leu Arg Tyr Pro Ile Leu Met Thr Gly Ser Leu Cys 135 140 Phe Arg Leu Ala Ile Gly Ser Trp Phe Cys Cys Phe Phe Leu Thr Ala 150 155 Ile Thr Met Val Leu Cys Arg Gln Asn Phe Cys Gly Pro Asn Glu 165 170 175 Ile Asp His Phe Phe Cys Asp Phe Ala Pro Leu Ile His Leu Ser Cys 180 185 190 Met Asp Thr Ser Leu Ile Glu Thr Val Ala Phe Ala Thr Ser Ser Ala 200 205 Val Thr Leu Val Pro Phe Phe Leu Ile Thr Ile Ser Tyr Ser Cys Ile 215 220 Leu Ile Ala Ile Leu Arg Ile Pro Ser Gly Thr Gly Arg Lys Lys Ala 230 235 Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Thr Val Phe Tyr Gly 250 Thr Leu Ile Ala Thr Tyr Leu Val Pro Ser Ala Asn Ser Ser Gln Tyr 265 Leu Arg Lys Gly Phe Ser Leu Leu Tyr Thr Ile Leu Thr Pro Met Phe 275 280 Asn Pro Ile Ile Tyr Ser Leu Arg Asn Arg Asp Ile His Glu Ala Leu 295 Lys Lys Cys Leu Ser Lys Lys Ser Asp Phe Leu Ile

310

```
<210> 1948
<211> 312
<212> PRT
<213> Mus musculus
<400> 1948
Met Val Glu Asn Phe Asn Ala Ser Trp Glu Gly Tyr Phe Ile Phe Leu
1
                                    10
Gly Phe Ser Lys Trp Pro His Leu Glu Val Val Leu Phe Val Val Ile
                                25
Leu Ile Phe Tyr Met Met Thr Leu Met Gly Asn Leu Phe Ile Ile Ile
                            40
Leu Ser His Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
Ser Asn Leu Ser Ala Leu Asp Leu Cys Tyr Thr Thr Ser Ser Val Pro
Gln Leu Leu Phe Asn Leu Trp Gly Pro Lys Lys Thr Ile Ser Tyr Ala
                                    90
Gly Cys Met Leu Gln Leu Tyr Phe Val Leu Ala Leu Gly Thr Thr Glu
            100
                                105
                                                     110
Cys Val Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val Ala Val Cys
       115
                            120
                                                125
Lys Pro Leu His Tyr Ser Val Leu Met Asn Pro Arg Phe Cys Gln Leu
                        135
                                            140
Leu Ala Ala Ala Ser Trp Val Cys Gly Phe Thr Thr Ser Ala Leu His
                    150
                                        155
Ser Ser Phe Thr Phe Trp Val Pro Leu Cys Gly His Arg Lys Val Asp
                165
                                    170
His Phe Phe Cys Glu Val Pro Ala Leu Leu Gln Leu Ser Cys Val Asp
            180
                                185
                                                     190
Ile His Ala Asn Glu Met Thr Leu Met Val Met Ser Ala Ile Phe Val
        195
                            200
Val Ile Pro Leu Ile Leu Ile Leu Ser Ser Tyr Ala Ala Ile Ala Trp
                        215
                                            220
Thr Val Leu Glu Met Gln Ser Thr Thr Arg Leu Gln Lys Val Phe Gly
                    230
                                        235
Thr Cys Gly Ala His Leu Thr Val Val Ser Leu Phe Phe Ile Pro Ile
                245
                                    250
Met Cys Ile Tyr Leu Gln Pro Ser Thr Lys Ser Ser Gln Asp His Ala
                                                     270
                                265
Lys Phe Ile Ala Leu Phe Tyr Thr Val Val Thr Pro Ser Leu Asn Pro
                            280
Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Arg Gly Ala Ile Arg Arg
Leu Ser Arg Tyr Glu Arg Glu Lys
<210> 1949
<211> 317
<212> PRT
<213> Mus musculus
<400> 1949
Met Thr Ile Asn Lys Ser Ser Gly Gly Asp Phe Ile Leu Val Gly Phe
1
                                    10
                                                         15
Ser Asp Gln Pro Gln Leu Glu Lys Ile Leu Phe Val Leu Val Leu Ile
                                25
            20
                                                     30
```

```
Ser Tyr Leu Leu Thr Leu Val Gly Asn Thr Ala Ile Ile Leu Val Ser
Cys Leu Asp Ser Ala Leu Gln Thr Pro Met Tyr Tyr Phe Leu Thr Asn
                                            60
Leu Ser Phe Val Asp Ile Cys Phe Ser Thr Ser Ile Val Pro Gln Leu
                    70
Leu Trp Asn Leu His Gly Pro Ala Lys Thr Ile Thr Ala Thr Gly Cys
                                    90
Ala Ile Gln Leu Tyr Val Ser Leu Ala Leu Gly Ser Thr Glu Cys Val
           100
                                105
Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg Pro
                            120
       115
Leu His Tyr Ala Thr Val Met His Pro Arg Leu Cys Gln Ser Leu Ala
                       135
                                            140
Gly Val Ala Trp Leu Ser Gly Val Gly Asn Thr Leu Ile Gln Gly Thr
                    150
                                        155
Ile Thr Leu Arg Leu Pro Arg Cys Gly Asn His Lys Ile Tyr His Phe
               165
                                    170
Ile Cys Glu Val Pro Ala Met Ile Lys Leu Ala Cys Val Asp Ile His
           180
                                185
Ala Asn Glu Val Gln Leu Phe Met Ala Ser Leu Val Leu Leu Leu
       195
                            200
Pro Leu Thr Leu Ile Leu Val Ser Tyr Gly Tyr Ile Ala Gln Ala Leu
                       215
                                            220
Met Arg Leu Arg Ser Ala Leu Thr Trp Gly Lys Ala Leu Gly Thr Cys
                   230
                                        235
Gly Ser His Met Leu Val Val Leu Phe Tyr Gly Thr Ile Thr Ala
               245
                                    250
Ile Tyr Ile Gln Pro Asn Ser Ser Tyr Ala His Ser Gln Gly Lys Phe
           260
                                265
Ile Thr Leu Leu Tyr Thr Val Val Ile Pro Thr Leu Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Arg Leu Val
                       295
Arg Lys Asn Asn Ser Thr Gly Lys Lys Ile Leu Ser Arg
```

```
<210> 1950
<211> 306
<212> PRT
```

<213> Mus musculus

<400> 1950

 Met Glu Val Asn Arg
 Thr Leu Val Thr Ala Phe Ile Leu Arg Gly Ile

 1
 5
 10
 15

 Thr Asp Leu Pro Glu Leu Gln Val Pro Met Phe Leu Val Phe Phe Phe 20
 25
 30

 Ile Tyr Val Thr Thr Met Val Gly Asn Leu Gly Leu Ile Val Leu Ile 35
 40
 45

 Trp Lys Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly Ser 50
 60

 Leu Ala Phe Ala Asp Ala Cys Thr Ser Ser Ser Val Thr Pro Arg Met 75
 80

 Leu Val Asn Ile Leu Asp Asn Gly Lys Met Ile Ser Leu Ser Glu Cys 90
 95

 Met Ala Gln Tyr Tyr Val Phe Gly Ser Ser Ala Thr Thr Glu Cys Phe 100
 105

 Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro

```
120
        115
Leu Leu Tyr Leu Val Val Met Ser Asn Arg Val Cys Thr Cys Leu Ile
                        135
                                            140
Ser Gly Ser Tyr Ile Ile Gly Phe Leu His Pro Leu Ile His Val Gly
                    150
                                        155
Leu Leu Phe Arg Leu Thr Phe Cys Lys Ser Asn Ile Ile Asp His Phe
                165
                                    170
Tyr Cys Glu Ile Leu Pro Leu Tyr Thr Ile Ser Cys Thr Asp Pro Ser
            180
                                185
                                                     190
Ile Asn Ala Phe Val Val Phe Ile Phe Ala Ala Val Ile Gln Ala Val
        195
                            200
                                                 205
Thr Phe Met Ser Ile Ala Val Ser Tyr Ala His Val Leu Phe Ser Ile
                        215
                                             220
Leu Lys Thr Lys Ser Glu Lys Gly Arg Arg Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ala His Leu Leu Ser Val Ser Leu Phe Tyr Gly Thr Leu Phe Phe
                                    250
Met Tyr Val Ser Pro Gly Ser Gly Pro Ser Lys Tyr Lys Asn Lys Met
            260
                                265
Tyr Ser Leu Phe Tyr Thr Ile Val Ile Pro Leu Leu Asn Pro Phe Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Leu Gly Ala Leu Arg Lys Ile Met
Lys Pro
305
<210> 1951
<211> 309
<212> PRT
<213> Mus musculus
<400> 1951
Met Glu Lys Lys Asn Glu Thr Leu Trp Thr Glu Phe Val Leu Thr Gly
                                    10
Leu Thr Cys Leu Pro Gln Trp Lys Pro Leu Leu Phe Leu Val Phe Leu
                                25
Val Ile Tyr Phe Met Thr Ile Val Gly Asn Leu Gly Leu Ile Thr Leu
                            40
Ile Trp Asn Asp Pro His Leu His Ile Pro Met Tyr Leu Phe Leu Ser
                        5.5
Asn Leu Ala Phe Val Asp Thr Trp Leu Ser Ser Thr Val Thr Pro Arg
                    70
                                        75
Met Leu Phe Asn Leu Leu Asp Lys Gly Lys Val Ile Ser Val Ala Glu
                                    90
Cys Lys Thr Gln Phe Phe Ser Phe Ala Ile Ser Val Thr Thr Glu Cys
                                105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Pro Val Ile Met Thr Asn Arg Leu Cys Val Arg Leu
                        135
                                             140
Leu Ala Leu Ser Phe Ile Gly Gly Phe Leu His Ala Val Ile His Glu
                    150
                                        155
Ser Phe Leu Ser Arg Leu Thr Phe Cys Asn Ser Asn Ile Ile Tyr His
                165
                                    170
                                                         175
Phe Tyr Cys Asp Val Ile Pro Leu Leu Lys Ile Ser Cys Thr Asp Pro
            180
                                185
                                                    190
Ser Leu Asn Tyr Leu Ile Ile Phe Ile Phe Ser Gly Ser Ile Gln Val
```

```
      Phe
      Thr
      Ile
      Met
      Thr
      Val
      Leu
      Ile
      Ser
      Tyr
      Thr
      Phe
      Val
      Leu
      Phe
      Thr

      210
      Leu
      Lys
      Lys
      Ser
      Asp
      Lys
      Gly
      Ile
      Arg
      Lys
      Ala
      Phe
      Ser
      Thr
      235
      Lys
      Ala
      Phe
      Ser
      Thr
      240

      Cys
      Gly
      Ala
      His
      Leu
      Leu
      Ser
      Val
      Ser
      Leu
      Tyr
      Tyr
      Tyr
      Gly
      Pro
      Leu
      L
```

<210> 1952 <211> 309 <212> PRT

<213> Mus musculus

<400> 1952 Met Gly Thr Glu Asn Thr Thr Leu Leu Thr Glu Phe Val Leu Thr Gly Leu Ser His Gln Pro Gln Trp Lys Ile Pro Leu Phe Leu Leu Phe Leu 20 Val Ile Tyr Leu Ile Thr Ile Val Gly Asn Leu Gly Leu Ile Ile Leu 40 Ile Trp Asn Asp Pro Arg Leu Gln Ile Pro Met Tyr Leu Phe Leu Gly 55 Cys Leu Ala Leu Val Asp Thr Leu Leu Ser Ser Thr Val Thr Pro Lys 70 75 Met Leu Leu Thr Phe Thr Ala Lys Ser Lys Leu Ile Ser Leu Ser Glu 90 Cys Met Ile Gln Phe Phe Ser Phe Val Met Cys Ala Thr Met Glu Cys 105 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys 120 Pro Leu Leu Tyr Pro Val Ile Met Thr Asn Arg Leu Cys Val Arg Leu 135 Leu Val Leu Thr Phe Val Thr Gly Ile Leu His Ala Ser Ile His Glu 150 155 Gly Met Leu Cys Arg Leu Thr Phe Cys Asn Ser Asn Val Ile His His 165 170 Phe Tyr Cys Asp Val Met Pro Leu Leu Lys Ile Ser Cys Thr Asp Pro 180 185 Ser Leu Asn Tyr Leu Ile Val Phe Ile Phe Ser Gly Ser Ile Gln Val 195 200 205 Phe Thr Ile Ser Thr Ile Leu Gly Ser Tyr Thr Leu Val Leu Phe Thr 215 220 Ile Leu Lys Lys Lys Ser Ala Lys Gly Ile Lys Lys Ala Phe Ser Thr 230 235 Cys Gly Ala His Leu Leu Ser Val Cys Leu Tyr Tyr Gly Ser Leu Leu 245 250 Phe Met Tyr Leu Leu Pro Ala Ser Gln Lys Ala Gln Asp Glu Asp Met 260 265 270 Met Asp Ser Val Phe Tyr Thr Val Ile Ile Pro Val Met Asn Pro Ile 280 Ile Tyr Ser Leu Arg Asn Lys Gln Ile Lys Asp Ser Leu Glu Lys Phe

Leu Lys Arg Asn Val

305

<210> 1953

<211> 313 <212> PRT

<213> Mus musculus

<400> 1953

Met Ala Asn Ser Thr Thr Val Thr Glu Phe Ile Leu Leu Gly Leu Ser 5 Asp Ala Cys Glu Leu Gln Val Leu Ile Phe Leu Gly Phe Leu Leu Thr Tyr Phe Leu Ile Leu Leu Gly Asn Phe Leu Ile Ile Phe Ile Thr Leu Ala Asp Arg Arg Leu Tyr Thr Pro Met Tyr Tyr Phe Leu Arg Asn Phe 55 Ala Met Leu Glu Ile Trp Phe Thr Ser Val Ile Phe Pro Lys Met Leu 70 75 Thr Asn Ile Ile Thr Gly His Lys Thr Ile Ser Leu Leu Gly Cys Phe 85 90 Leu Gln Ala Phe Leu Tyr Phe Phe Leu Gly Thr Thr Glu Phe Phe Leu 100 105 Leu Ala Val Met Ser Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu 120 125 Arg Tyr Ala Thr Ile Met Ser Lys Arg Val Cys Val Gln Leu Val Phe 130 135 140 Cys Ser Trp Met Ser Gly Leu Leu Ile Ile Val Pro Ser Ser Ile 150 155 Val Phe Gln Gln Pro Phe Cys Gly Pro Asn Ile Ile Asn His Phe Phe 170 165 Cys Asp Asn Phe Pro Leu Met Glu Leu Ile Cys Ala Asp Thr Ser Leu 180 185 190 Val Glu Phe Leu Gly Phe Val Ile Ala Asn Phe Ser Leu Leu Gly Thr 200 195 Leu Ala Val Thr Ala Thr Cys Tyr Gly His Ile Leu Tyr Thr Ile Leu 215 His Ile Pro Ser Ala Lys Glu Arg Lys Lys Ala Phe Ser Thr Cys Ser 230 235 Ser His Ile Ile Val Val Ser Leu Phe Tyr Gly Ser Cys Ile Phe Met 250 Tyr Val Arg Ser Gly Lys Asn Gly Gln Gly Glu Asp His Asn Lys Val 265 270 Val Ala Leu Leu Asn Thr Val Val Thr Pro Thr Leu Asn Pro Phe Ile 280 Tyr Thr Leu Arg Asn Lys Gln Val Lys Gln Val Phe Arg Glu His Val 295 Ser Lys Phe Gln Lys Phe Ser Gln Thr

<210> 1954

<211> 309

<212> PRT

<213> Mus musculus

```
Met Ala Val Gly Asn Ser Ser Ser Val Lys Glu Phe Ile Leu Leu Gly
Leu Thr Gln Glu Pro Glu Leu Gln Leu Pro Leu Phe Phe Leu Phe Leu
Gly Ile Tyr Val Val Ser Val Met Gly Asn Leu Gly Leu Ile Val Leu
Ile Val Leu Asn Pro Pro Leu His Thr Pro Met Tyr Tyr Phe Leu Phe
Asn Leu Ser Phe Thr Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro Arg
                    70
Met Leu Val Gly Phe Val Lys Gln Asn Thr Ile Ser His Ala Glu Cys
Met Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Ile Asp Glu Cys Tyr
                                105
Ile Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys Pro
                            120
Leu Leu Tyr Gln Val Thr Met Ser His Gln Val Cys Leu Leu Met Thr
                        135
                                            140
Val Gly Met Tyr Val Met Gly Leu Val Gly Ala Ile Ala His Ile Val
                    150
                                        155
Cys Met Leu Arg Leu Thr Phe Cys Glu Gly His Ile Ile Asn His Tyr
                165
                                    170
Met Cys Asp Ile Pro Pro Leu Leu Lys Leu Ser Cys Thr Ser Thr Tyr
                                185
                                                    190
Ile Asn Glu Leu Val Val Phe Ile Val Val Gly Val Asn Val Ile Val
                            200
Pro Thr Leu Thr Ile Phe Ile Thr Tyr Thr Leu Ile Leu Ser Asn Ile
                        215
                                            220
Leu Ser Ile His Ser Ala Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                    230
                                        235
Gly Ser His Val Ile Ala Val Ser Leu Phe Phe Gly Ala Ala Ala Phe
                245
                                    250
Met Tyr Leu Lys Pro Ser Ser Ala Ser Val Asp Glu Glu Lys Leu Ser
                                265
                                                    270
            260
Thr Ile Phe Tyr Thr Ile Val Gly Pro Met Leu Asn Pro Phe Ile Tyr
                            280
                                                285
Ser Ile Arg Asn Lys Asp Val His Ile Ala Leu Arg Lys Thr Leu Lys
                        295
Lys Ser Met Phe Thr
305
```

```
<210> 1955
<211> 314
```

<212> PRT

<213> Mus musculus

<400> 1955

 Met Thr Leu Glu Arg Met Ala Phe Ser Asn Asp Ser Ser Val Lys Glu

 1
 5
 10
 15

 Phe Ile Leu Leu Gly Leu Thr Gln Gln Pro Glu Leu Gln Met Pro Leu
 20
 25
 30

 Phe Phe Leu Phe Leu Gly Ile Tyr Val Val Ser Met Val Gly Asn Leu
 35
 40
 45

 Gly Leu Ile Val Leu Ile Val Leu Asn Pro His Leu His Thr Pro Met
 50
 60

 Tyr Tyr Phe Leu Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Ser
 65

 Val Ile Thr Pro Lys Met Leu Val Gly Phe Val Lys Gln Asn Ile Ile

```
90
Ser His Ala Glu Cys Met Thr Gln Leu Phe Phe Phe Ser Phe Phe Val
                                105
Ile Asp Glu Cys Tyr Ile Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala
                                                125
       115
                            120
Ala Ile Cys Lys Pro Leu Leu Tyr Gln Val Thr Met Ser Tyr Gln Val
                        135
                                            140
Cys Leu Leu Met Thr Gly Gly Met Tyr Val Met Gly Leu Val Gly Ala
                    150
                                        155
Ile Ala His Ile Val Cys Met Leu Arg Leu Thr Phe Cys Glu Gly Tyr
                165
                                    170
Ile Ile Asn His Tyr Met Cys Asp Ile Pro Pro Leu Leu Lys Leu Ser
            180
                                185
                                                     190
Cys Thr Ser Thr Tyr Ile Asn Glu Leu Val Val Phe Ile Val Val Gly
       195
                            200
Val Asn Val Ile Val Pro Thr Leu Thr Ile Phe Ile Ser Tyr Thr Leu
                        215
Ile Leu Ser Asn Ile Leu Ser Ile His Ser Ala Glu Gly Arg Ser Lys
                    230
                                        235
                                                             240
Ala Phe Arg Thr Cys Gly Ser His Phe Ile Ala Val Ser Leu Phe Tyr
                245
                                    250
Gly Ala Ser Ala Phe Met Tyr Leu Lys Pro Ser Ser Ala Ser Val Asp
                                265
Asp Asp Lys Ile Ser Thr Ile Phe Tyr Ile Ile Val Gly Pro Met Leu
       275
                            280
                                                285
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val His Ile Ala Leu
                        295
Arg Lys Thr Leu Lys Lys Ser Thr Phe Ile
                    310
```

<210> 1956

<211> 313

<212> PRT

<213> Mus musculus

<400> 1956

Met Lys Gln Met Ala Thr Glu Asn Asp Ser Ser Val Ser Glu Phe Ile 10 Leu Leu Gly Leu Thr Asp Gln Pro Glu Leu Gln Leu Pro Leu Phe Ala 25 Leu Phe Leu Leu Asn Tyr Thr Ala Thr Met Val Gly Asn Leu Thr Leu 40 Met Ser Leu Ile Leu Val His Ser Asn Leu His Thr Pro Met Tyr Phe 55 Phe Ile Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Phe Val Phe 75 Thr Pro Lys Met Leu Met Lys Phe Phe Leu Glu Lys Asn Thr Ile Ser 90 Phe Lys Gly Cys Met Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Asn 100 105 110 Thr Glu Ser Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala 120 Ile Cys Lys Pro Leu Leu Tyr Gln Ala Ile Met Leu Pro Arg Ile Cys 135 140 Cys Leu Leu Met Phe Met Ser Tyr Leu Met Gly Phe Val Ser Ala Met 155 150 Ile Leu Thr Gly Leu Met Phe Arg Leu Asn Phe Cys Asn Ser Asn Ile 170

```
Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu Gln Ile Ser Cys
                                185
Ser Asp Thr Tyr Leu Asn Glu His Val Ser Ser Ala Val Val Gly Thr
        195
                            200
Ala Ile Ile Leu Cys Ser Leu Leu Ile Leu Met Ser Tyr Ala Leu Ile
                        215
                                            220
Leu Phe Asn Ile Leu Asn Met Ser Ser Gly Lys Gly Trp Ser Lys Ala
                    230
                                        235
Leu Gly Thr Cys Gly Ser His Ile Ile Thr Ala Ser Leu Phe Tyr Gly
                245
                                    250
Ser Gly Leu Leu Ala Tyr Val Lys Pro Ser Ser Pro Glu Thr Val Gly
                                265
Gln Gly Lys Phe Leu Thr Val Phe Tyr Thr Cys Leu Val Pro Val Leu
        275
                            280
Asn Pro Leu Ile Tyr Ser Leu Pro Asn Lys Asp Val Lys Ile Ala Met
                        295
Lys Lys Thr Leu Lys Arg Ile Thr Ser
                    310
```

<210> 1957 <211> 331 <212> PRT

<213> Mus musculus

<400> 1957

Met Leu Leu Gln Met Gln His Met Lys Gln Met Asn Met Glu Asn Asp Ser Ser Val Ser Glu Phe Ile Leu Met Gly Leu Thr Tyr Gln Pro Glu 20 25 Leu Arg Trp Pro Leu Phe Val Leu Phe Leu Val Asn Tyr Ser Ala Thr 40 Val Met Gly Asn Leu Ser Leu Met Thr Leu Ile Phe Leu Asn Ser His 55 60 Leu His Thr Pro Met Tyr Phe Phe Ile Leu Asn Leu Ser Phe Ile Asp 70 75 Phe Cys Tyr Ser Phe Asp Phe Thr Pro Lys Met Leu Met Gly Phe Val 85 90 Ser Glu His Asn Thr Ile Ser Phe Thr Gly Cys Met Thr Gln Leu Phe 105 100 110 Phe Phe Cys Leu Phe Val Asn Ser Glu Cys Tyr Val Leu Thr Ala Met 120 115 125 Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu Leu Tyr Thr Val 135 140 Val Met Ser Pro Arg Ala Cys Ser Leu Leu Met Leu Ala Ala His Leu 150 155 Met Gly Val Ser Ser Ala Ile Val His Thr Gly Cys Ile Ile Gln Leu 165 170 175 Arg Phe Cys Gly Ser Lys Val Ile Asn His Tyr Met Cys Asp Thr Phe 180 185 190 Pro Leu Leu Glu Leu Ser Cys Gly Ser Ser His Val Asn Glu Leu Val 195 200 Ser Ser Val Ser Val Ala Val Val Val Ile Ser Ser Leu Ile Ile 215 220 Val Ser Ser Tyr Ala Leu Ile Leu Val Asn Val Met His Leu Ser Ser 230 235 Ser Lys Gly Trp Ser Lys Ala Val Ser Thr Cys Ser Ser His Ile Ile 250 Thr Val Ala Leu Phe Tyr Gly Phe Gly Leu Leu Ala His Ile Lys Pro

```
260
                                265
Ser Ser Ala Glu Ser Val Val Glu Arg Lys Phe Phe Ser Val Val Tyr
 .
        275
                            280
Thr Phe Val Leu Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn
                        295
                                            300
Lys Asp Val Lys Leu Ala Leu Lys Arg Thr Leu Lys Arg Val Thr Ile
Gln Gly Lys Cys Leu Cys Cys Ser His Lys Ser
                325
<210> 1958
<211> 316
<212> PRT
<213> Mus musculus
<400> 1958
Met Ala Thr Gly Asn His Tyr Ser Val Thr Glu Phe Ile Leu Thr Gly
Leu Thr Glu Gln Pro Glu Leu Gln Met Pro Leu Phe Phe Leu Phe Leu
Val Asn Cys Leu Ile Thr Val Val Gly Asn Leu Ser Leu Met Ser Leu
        35
Ile Cys Cys Asn Ser Asn Leu Gln Thr Pro Met Tyr Phe Phe Leu Phe
. 50
Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Phe Ala Phe Thr Pro Lys
                    70
                                        75
Thr Leu Met Ser Phe Val Leu Glu Lys Asn Ile Ile Tyr Phe Thr Gly
                85
                                    90
Cys Met Thr Gln Leu Phe Phe Met Cys Leu Phe Ala Asn Ser Glu Cys
                                105
                                                    110
Tyr Leu Val Thr Ala Met Asp Tyr Asp His Tyr Val Ala Ile Cys Gln
                            120
                                                125
Pro Leu Leu Tyr Met Ile Ile Thr Ser Pro Met Thr Cys Ser Leu Met
                        135
                                            140
Met Phe Gly Ser Tyr Leu Met Gly Gly Ile Gly Ala Ile Val His Thr
                    150
                                        155
Gly Cys Met Ile Arg Leu Asn Phe Cys Gly Ser Asn Ile Ile Asn His
                165
                                    170
Tyr Met Tyr Asp Ile Phe Pro Leu Gln Leu Ser Cys Ser Ser Ile
            180
                                185
                                                    190
Tyr Ala Asn Glu Leu Val Ser Ser Val Phe Val Ser Thr Val Val Leu
       195
                            200
Ala Ser Ser Phe Leu Ile Leu Thr Ser Tyr Ala Leu Ile Leu Phe Asn
                                            220
Ile Thr Gln Leu Ser Gly Lys Gly Leu Ser Lys Ala Met Ser Thr Cys
                    230
                                        235
Ser Ser His Ile Met Thr Val Val Leu Phe Tyr Gly Phe Ala Met Leu
                245
                                    250
Thr His Val Lys Thr Ser Ser Asp Glu Ser Val Asn Gln Gly Asn Phe
            260
                                265
                                                    270
Phe Cys Leu Phe Cys Thr Phe Leu Val Pro Leu Leu Asn Pro Phe Ile
       275
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Leu Ala Leu Lys Arg Thr Leu
                        295
                                            300
Arg Arg Leu Thr Val Ser Glu Ser Leu Gly Leu Pro
                    310
```

```
<210> 1959
<211> 312
<212> PRT
<213> Mus musculus
<400> 1959
Met Val Asn Gln Ser Ser Pro Val Gly Phe Leu Leu Gly Phe Ser
Glu His Pro Gln Leu Glu Lys Val Leu Phe Val Ile Val Leu Cys Ser
Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu Ile Leu Leu Leu Ser Thr
Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu
                        55
Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr Cys Val Pro Gln Met Leu
                    70
                                        75
Phe Asn Leu Trp Gly Pro Ala Lys Thr Ile Ser Phe Leu Gly Cys Ser
                                    90
                                                        95
Val Gln Leu Phe Ile Phe Leu Ser Leu Gly Thr Thr Glu Cys Ile Leu
           100
                                105
Leu Thr Val Met Ser Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu
       115
                            120
His Tyr Ala Thr Val Ile His Pro Arg Leu Cys Trp Lys Leu Ala Ala
   130
                       135
Val Ala Trp Met Met Gly Leu Leu Gln Ser Ile Val Gln Thr Pro Pro
                   150
                                        155
Thr Leu Lys Leu Pro Phe Cys Pro His Arg Gln Ile Asp Asp Phe Leu
                                    170
               165
Cys Glu Val Pro Ser Leu Ile Arg Leu Ser Cys Gly Asp Thr Thr Phe
           180
                                185
                                                    190
Asn Glu Ile Gln Leu Ala Val Ser Ser Val Ile Leu Val Val Pro
       195
                            200
Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Ala Arg Ala Val Met
                        215
Arg Ile Asn Ser Thr Glu Ala Trp Lys Lys Ala Leu Arg Thr Cys Ser
                    230
                                        235
Ser His Leu Ile Val Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val
                                    250
Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Gln Glu Arg Gly Lys Phe Phe
                                265
Gly Leu Phe Tyr Ala Val Gly Thr Pro Thr Leu Asn Pro Leu Ile Tyr
                            280
Thr Leu Arg Asn Lys Glu Val Lys Arg Ala Phe Trp Arg Leu Leu Gly
                                            300
                        295
Lys Asp Gly Asp Ser Lys Asn Thr
                    310
<210> 1960
<211> 310
<212> PRT
<213> Mus musculus
<400> 1960
Met Val Asn Gln Ser Ser Pro Val Gly Phe Leu Leu Gly Phe Ser
                                    10
Glu His Pro Gln Leu Glu Lys Val Leu Phe Val Val Leu Cys Ser
Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu Ile Leu Leu Ser Thr
```

```
40
Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu
                        55
Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr Cys Val Pro Gln Met Leu
                    70
                                         75
Phe Asn Leu Trp Gly Pro Ala Lys Thr Ile Ser Phe Leu Gly Cys Phe
                8.5
                                    90
Val Gln Leu Phe Ile Phe Leu Ser Leu Gly Thr Thr Glu Cys Ile Leu
            100
                                105
Leu Ala Val Met Ser Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu
                            120
       115
                                                125
His Tyr Ala Thr Val Ile His Pro Arg Leu Cys Cys Gln Leu Ala Ala
   130
                        135
                                            140
Val Ala Trp Thr Ile Gly Leu Val Glu Ser Val Val Gln Thr Pro Ser
                    150
                                        155
Thr Leu Arg Leu Pro Phe Cys Pro His His Gln Val Asp Asp Phe Val
                                    170
                165
Cys Glu Val Pro Ala Leu Ile Arg Leu Ser Cys Gly Asp Thr Thr Tyr
            180
                                185
                                                     190
Asn Glu Ile Gln Met Ala Ile Ala Ser Val Phe Ile Leu Val Val Pro
       195
                            200
Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Ala Arg Ala Val Leu
                        215
Arg Ile Ser Ser Ala Lys Gly Arg Arg Lys Ala Phe Gly Thr Cys Ser
                    230
                                        235
Ser His Leu Ile Val Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val
                245
                                    250
Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Arg Glu Arg Gly Lys Phe Phe
                                265
                                                     270
            260
Gly Leu Phe Tyr Ala Val Gly Thr Pro Ser Leu Asn Pro Leu Ile Tyr
        275
                            280
Thr Leu Arg Asn Lys Glu Val Lys Arg Ala Phe Arg Arg Leu Leu Trp
                        295
Lys Glu Val Lys Pro Gly
                    310
<210> 1961
<211> 314
<212> PRT
<213> Mus musculus
<400> 1961
Met Gly Lys Asn Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Gln Asp Pro Val Gly Gln Lys Ala Leu Phe Val Leu Phe Leu Leu Met
                                25
Tyr Ile Val Thr Met Ala Gly Asn Leu Ile Ile Val Val Thr Ile Ile
        35
                            40
Ala Ser Pro Ser Leu Ser Ser Pro Met Tyr Phe Phe Leu Ala Tyr Leu
                        55
Ser Leu Met Asp Ala Ile Tyr Ser Thr Ala Ile Ser Pro Lys Leu Ile
Met Asp Leu Cys Asn Lys Lys Thr Ile Ser Phe Arg Ala Cys Met
                                    90
Gly Gln Leu Phe Val Glu His Leu Phe Gly Ala Thr Glu Ile Phe Leu
                                105
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
```

```
His Tyr Leu Thr Ile Met Asn His Arg Val Cys Ile Leu Leu Val Met
    130
                        135
                                            140
Ala Thr Trp Val Gly Gly Phe Ala His Ser Met Ala Gln Val Leu Phe
                    150
                                        155
Val Tyr Asp Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ala
                                    170
Cys Asp Met Tyr Pro Leu Leu Val Leu Val Cys Ser Asp Thr Tyr Phe
            180
                                185
Leu Gly Leu Thr Val Ile Ala Asn Asp Gly Ala Ile Cys Met Val Val
                            200
Phe Val Ile Leu Leu Ala Ser Tyr Gly Ile Ile Leu Asn Ser Leu Lys
                        215
Thr His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
His Ile Met Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
                                    250
Val Arg Pro Val Ser Asn Phe Pro Val Asp Lys Ser Val Thr Ile Phe
Tyr Thr Val Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
Asn Ser Glu Ile Lys His Ser Met Leu Lys Leu Trp Ser Lys Ile Leu
                        295
                                            300
His Ser Asp Arg Leu Arg Lys Ser Cys Cys
                    310
```

<210> 1962 <211> 302 <212> PRT

<213> Mus musculus

<400> 1962

Met Asp Ser Pro Arg Asn Val Thr Glu Phe Phe Met Leu Gly Leu Ser Gln Asn Pro Gln Val Gln Arg Met Leu Phe Gly Leu Phe Leu Leu Val 25 Phe Leu Val Ser Val Gly Gly Asn Met Leu Ile Ile Ile Thr Ile Thr Phe Ser Pro Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Ser Tyr Leu Ser Phe Ile Asp Thr Cys Tyr Ser Ser Cys Met Thr Pro Lys Leu Ile 75 Ala Asp Ser Leu His Glu Gly Arg Ala Ile Ser Phe Glu Gly Cys Leu 90 Ala Gln Phe Phe Val Ala His Leu Leu Gly Gly Thr Glu Ile Ile Leu 100 105 110 Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Thr Thr Met Thr Arg His Val Cys Ile Val Leu Val Ala 135 140 Val Ala Trp Leu Gly Gly Ile Leu His Ser Thr Ala Gln Leu Phe Leu 150 155 Val Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asn His Phe Val 170 175 Cys Asp Leu Tyr Pro Leu Leu Glu Leu Ala Cys Thr Asp Thr Tyr Val 185 190 Ile Gly Leu Leu Val Val Ala Asn Ser Gly Val Ile Cys Leu Leu Asn 200 Phe Leu Met Leu Ala Ala Ser Tyr Ile Val Ile Leu Arg Thr Leu Arg

```
215
                                            220
   210
Ser His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ala
                    230
                                        235
His Phe Thr Val Val Ala Leu Phe Phe Val Pro Cys Ile Phe Ile Tyr
                245
Met Arg Pro Ser Ser Thr Leu Ser Ile Asp Lys Ile Val Ala Val Phe
            260
Tyr Cys Ile Leu Thr Pro Met Phe Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
Asn Ala Glu Val Lys Asn Ala Met Lys Asn Leu Trp Arg Lys
                                            300
<210> 1963
<211> 306
<212> PRT
<213> Mus musculus
<400> 1963
Met Ser Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Gln Asp Pro
                                    10
Asp Leu Gln Lys Phe Leu Phe Ile Val Cys Leu Ile Ile Tyr Leu Ile
            20
                                25
Thr Leu Ala Gly Asn Met Leu Ile Ser Val Thr Ile Phe Ile Ser Pro
                            40
Ala Leu Ala Thr Pro Met Tyr Phe Phe Leu Ser Tyr Leu Ser Val Ile
                        55
Asp Gly Phe Tyr Ser Ser Ser Ile Ala Pro Lys Met Ile Tyr Asp Leu
                    70
                                        75
Ile Ser Glu Lys Ser Thr Ile Ser Phe Asn Gly Cys Met Thr Gln Leu
                85
Phe Val Glu His Phe Phe Ala Ala Glu Ile Ile Leu Leu Met Ser
                                105
            100
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Met
        115
                            120
                                                125
Thr Ile Met Asn Arg Pro Leu Cys Val Phe Leu Val Gly Ala Ala Val
                        135
                                            140
Ile Leu Gly Phe Ile His Gly Gly Ile Gln Ile Leu Phe Met Ala Gln
                    150
                                        155
Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Met Cys Asp Leu
                165
                                    170
Ile Pro Leu Leu Glu Leu Ala Cys Thr Asp Thr His Thr Leu Gly Pro
                                185
                                                    190
            180
Leu Ile Ala Ala Asn Ser Gly Ser Leu Cys Leu Leu Ile Phe Ser Met
                            200
        195
Leu Val Ala Ser Tyr Val Val Ile Leu Arg Ser Leu Arg Asn His Ser
                                            220
                        215
Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser His Val Thr
                    230
                                        235
Val Val Leu Phe Phe Val Pro Cys Ser Tyr Leu Tyr Leu Arg Pro
                245
                                    250
Met Thr Ser Phe Pro Thr Asp Lys Ala Val Thr Val Phe Cys Thr Leu
                                265
Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Glu Glu
                            280
Val Lys Arg Val Met Lys Lys Leu Trp Gly Arg Met Arg Lys Ala Gly
                                            300
    290
                        295
Asp Met
305
```

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<210> 1964
<211> 311
<212> PRT
<213> Mus musculus
<400> 1964
Met Gly Asn Phe Asn Thr Ser Thr Gln Glu Ser Phe Ile Leu Val Gly
1
Phe Ser Asp Trp Pro Gln Leu Gln Ala Phe Leu Phe Val Ile Ile Leu
            20
                                25
Ile Phe Tyr Ser Leu Thr Ile Phe Gly Asn Thr Thr Ile Ile Val Leu
        35
                            40
Ala Arg Leu Asp Leu Arg Leu His Lys Pro Met Tyr Phe Phe Leu Ser
                        55
His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln
                    70
                                        75
Leu Leu Ile Asn Leu Arg Gly Leu Asp Arg Thr Ile Ser Tyr Gly Gly
               85
                                    90
Cys Val Ala Gln Leu Phe Ile Phe Leu Ala Leu Ala Ser Thr Glu Cys
                                105
                                                    110
            100
Leu Ile Leu Val Ala Met Ala Phe Asp Arg Tyr Ala Ala Val Cys His
       115
                            120
                                                125
Pro Leu His Tyr Thr Ser Ile Met Asn Pro Ile Leu Cys Arg Ala Leu
                        135
                                            140
Ala Ile Ser Ser Trp Val Gly Gly Leu Val Asn Ser Leu Ile Gln Thr
                    150
                                        155
Gly Leu Val Met Ala Met Arg Leu Cys Gly His Gln Ile Asn His Phe
                165
                                    170
Phe Cys Glu Met Pro Ile Phe Leu Lys Leu Ala Cys Glu Asp Thr Glu
                                185
            180
                                                    190
Gly Thr Glu Ala Lys Met Phe Val Ala Arg Thr Ile Val Leu Val Cys
                            200
Pro Ala Val Leu Ile Leu Gly Ser Tyr Val His Ile Ala Lys Ala Val
                        215
                                            220
Leu Lys Val Lys Ser Met Ala Gly Arg Arg Lys Ala Phe Gly Thr Cys
                    230
                                        235
Gly Ser His Leu Met Val Val Ser Leu Phe Tyr Gly Ser Gly Ile Tyr
                245
                                    250
Thr Tyr Leu Gln Pro Val His Arg Tyr Ser Glu Ser Lys Gly Lys Phe
                                265
            260
Val Ala Leu Phe Tyr Thr Ile Val Thr Pro Met Phe Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Leu Leu
                        295
Gly Arg Gly Thr Asp Ser Gly
<210> 1965
<211> 318
<212> PRT
<213> Mus musculus
<400> 1965
Met Gly Ser Phe Asn Leu Ser Leu Glu Gly Phe Leu Leu Val Gly Phe
Ser Asp Trp Pro Gln Leu Glu Leu Ile Leu Leu Val Phe Ile Ser Ile
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Phe Tyr Ser Leu Thr Leu Cys Gly Asn Ile Thr Ile Ile Val Leu Thr
                           40
Gln Gln Asp Leu His Leu His Thr Pro Met Tyr Phe Phe Leu Ala His
                        55
Leu Ser Phe Leu Asp Leu Cys Phe Thr Ser Ser Thr Val Pro Lys Leu
                    70
                                        75
Leu Ile Ser Leu Ser Arg Gly Asp Gln Thr Ile Ser Tyr Ala Gly Cys
Met Thr Gln Phe Phe Ile Ala Leu Leu Leu Gly Gly Thr Glu Cys Val
Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg Pro
                            120
Leu His Tyr Thr Ser Ile Met His Pro Leu Leu Cys His Ala Leu Ala
                                            140
Ile Ser Ser Trp Val Gly Gly Leu Val Asn Ser Leu Thr Gln Thr Ser
                    150
                                        155
Leu Ile Met Thr Ile Pro Leu Cys Gly His His Leu Asn His Phe Phe
                                    170
                165
Cys Glu Met Leu Val Leu Leu Lys Leu Ala Cys Glu Asp Thr Val Gly
                                185
Thr Glu Thr Tyr Leu Phe Trp Ala Gly Ala Val Ile Leu Val Cys Pro
                            200
Val Ala Leu Ile Leu Gly Thr Tyr Ala His Ile Ala His Ala Val Leu
                        215
Lys Ile Lys Ser Arg Ser Gly Arg Arg Lys Ala Leu Gly Thr Cys Gly
                    230
Ser His Leu Thr Val Val Phe Leu Phe Tyr Gly Ser Ala Met Tyr Thr
                                    250
Tyr Leu Gln Pro Ile His Thr Tyr Ser Gly Ser Glu Gly Lys Phe Ala
                                265
Ala Leu Phe Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr
                            280
Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Cys Lys Val Leu Val
                        295
                                            300 '
Lys Gly Lys Lys Glu Thr Lys Thr Arg Arg Lys Met Val Glu
<210> 1966
<211> 311
<212> PRT
<213> Mus musculus
<400> 1966
Met Gly Thr Phe Asn Thr Ser Leu Gly Gly Gly Phe Ile Leu Val Gly
                                    10
Phe Ser Asp Trp Pro Ala Leu Glu Leu Ile Phe Phe Ile His Ile Leu
Ile Phe Tyr Ser Ile Thr Leu Phe Gly Asn Thr Ala Ile Ile Ala Leu
        35
Ser Arg Thr Asp Leu Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
```

70

100

His Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Thr Val Pro Gln

Leu Leu Ile Asn Leu His Gly Gln Asp Arg Thr Ile Ser Tyr Gly Gly

Cys Val Ala Gln Leu Phe Ile Phe Leu Ala Leu Gly Ser Thr Glu Ser

105

90

60

```
Val Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg
                            120
Pro Leu His Tyr Thr Thr Ile Met His Pro Val Leu Cys Gln Ala Leu
                        135
Ala Ile Ala Ser Trp Val Gly Gly Phe Leu Asn Ser Leu Ile Gln Thr
                    150
                                        155
Gly Leu Met Met Ala Met Pro Leu Cys Gly His Arg Leu Asn His Phe
                                    170
                165
Phe Cys Glu Met Pro Val Phe Leu Lys Leu Ala Cys Gln Asp Thr Gly
                                185
                                                    190
Gly Thr Glu Ala Lys Met Phe Val Ala Arg Val Val Ile Val Ala Val
        195
                            200
Pro Ala Met Leu Ile Leu Gly Ser Tyr Ala Gln Ile Ala Arg Ala Val
                        215
Leu Lys Val Lys Ser Val Ala Ala Arg Arg Lys Ala Ala Gly Thr Cys
                    230
                                        235
Gly Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Ser Ala Thr Tyr
                245
                                    250
Thr Tyr Leu Gln Pro Lys Asp Ser Tyr Ser Glu Ser Lys Gly Lys Phe
                                265
Val Ala Leu Phe Tyr Thr Ile Ile Thr Pro Met Phe Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Trp Lys Val Leu
                        295
Gly Arg Ala Ala Ala Thr Gly
305
```

```
<210> 1967
```

<400> 1967

Met Glu Ser Phe Asn Ile Ser Leu Gly Lys Gly Phe Ile Leu Val Gly Phe Ser Asp Trp Pro Ala Leu Glu Leu Ile Phe Phe Ile Tyr Ile Leu 20 Ile Phe Tyr Ser Leu Thr Leu Phe Gly Asn Thr Ala Ile Ile Ala Leu 40 Ser Arg Met Asp Leu Gln Leu His Thr Pro Met Tyr Tyr Phe Leu Cys His Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Thr Val Pro Gln 70 Leu Leu Ile Asn Leu His Gly Gln Asp Arg Thr Ile Ser Tyr Gly Gly 90 Cys Val Ser Gln Leu Phe Ile Thr Leu Ala Leu Gly Ser Thr Glu Ser 105 Val Leu Leu Val Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg 120 Pro Leu His Tyr Met Asn Ile Met His Pro Val Leu Cys Gln Ala Leu 135 140 Ala Ile Ala Ser Trp Val Gly Gly Phe Leu Asn Ser Leu Ile Gln Thr 150 Gly Leu Met Met Ala Met Pro Leu Cys Gly His Arg Leu Asn His Phe 165 170 Phe Cys Glu Met Pro Val Phe Leu Lys Leu Ala Cys Gln Asp Thr Gly 185 190 Gly Thr Glu Ala Lys Met Phe Val Ala Arg Ala Val Ile Val Ala Val

<211> 311

<212> PRT

<213> Mus musculus

```
200
                                                205
       195
Pro Ala Met Leu Ile Leu Gly Ser Tyr Ala Gln Ile Ala Arg Ala Val
                        215
Leu Lys Val Lys Ser Val Ala Ala Arg Arg Lys Ala Ala Gly Thr Cys
                    230
                                        235
Gly Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Ser Ala Thr Tyr
                                    250
Thr Tyr Leu Gln Pro Lys Asp Ser Tyr Ser Glu Ser Lys Gly Lys Phe
                                265
                                                    270
Val Ala Leu Phe Tyr Thr Ile Ile Thr Pro Met Phe Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Trp Lys Val Leu
                        295
Gly Arg Ala Ala Ala Thr Gly
<210> 1968
<211> 311
<212> PRT
<213> Mus musculus
<400> 1968
Met Glu Tyr Leu Asn Thr Ser Ser Glu Glu Gly Phe Ile Leu Val Gly
1
                                    10
Phe Ser Asp Trp Pro His Leu Glu Pro Thr Leu Phe Ala Phe Ile Ser
                                25
Ile Phe Tyr Ser Leu Thr Leu Phe Gly Asn Thr Val Ile Ile Leu
                            40
Ser Arg Leu Asp Leu Arg Leu His Thr Pro Met Tyr Tyr Phe Leu Cys
                        55
His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln
                    70
                                        75
Leu Leu Val Asn Leu Ser Gly Leu Asp Arg Thr Ile Ser Phe Gly Arg
                                    90
Cys Val Ala Gln Leu Cys Ile Val Leu Ser Leu Gly Gly Thr Glu Cys
           100
                                105
Val Leu Leu Val Ala Met Ala Ile Asp Arg Tyr Ala Ala Val Cys Arg
                            120
Pro Leu His Tyr Thr Thr Ile Met His Pro Val Leu Cys Arg Ala Leu
                        135
Val Val Phe Ser Trp Val Gly Gly Leu Val Asn Ser Leu Ile Gln Thr
                    150
                                        155
Ser Leu Val Met Ala Met Pro Leu Cys Gly His Gln Leu Asn His Phe
                165
                                    170
Phe Cys Glu Leu Pro Val Leu Leu Lys Met Ala Cys Glu Asp Thr Gly
            180
                                185
                                                    190
Gly Thr Glu Val Asn Leu Phe Val Ala Arg Val Ile Ile Leu Val Cys
                            200
Pro Leu Leu Ile Leu Gly Ser Tyr Ala His Ile Ala Arg Ala Val
                        215
Leu Asn Ile Arg Ser Met Ala Gly Arg Arg Lys Ala Phe Gly Thr Cys
Ala Ser His Leu Ile Val Val Ala Met Phe Tyr Gly Ser Ala Ile Ser
                                    250
Thr Tyr Leu Gln Pro Val His Arg Tyr Ser Glu Lys Glu Gly Lys Phe
                                                    270
                                265
Leu Ala Leu Phe Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile
```

```
295
Gly Arg Gly Thr Asp Ser Arg
<210> 1969
<211> 311
<212> PRT
<213> Mus musculus
<400> 1969
Met Gly Ser Phe Asn Ala Ser Leu Gly Lys Gly Phe Ile Leu Val Gly
1
                                    10
Phe Ser Asp Trp Pro Gln Leu Glu Leu Ile Leu Phe Ile Tyr Val Leu
Ile Phe Tyr Ser Leu Thr Leu Phe Gly Asn Thr Thr Ile Ile Ala Leu
                            40
Ser Gln Leu Asp Ile Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln
                    70
                                        75
Leu Leu Ile Asn Ile Ala Ala Gln Asp His Thr Ile Thr Tyr Gly Arg
                                    90
Cys Val Ala Gln Leu Phe Ser Val Leu Ala Leu Gly Ser Thr Glu Ser
                                105
           100
Met Leu Leu Val Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg
                            120
                                                125
Pro Leu His Tyr Thr Thr Ile Met His Pro Leu Leu Cys Gln Ala Leu
                        135
                                            140
Ala Ile Ser Ser Trp Val Ala Gly Leu Val Asn Ser Leu Ile Gln Thr
                    150
                                        155
Gly Leu Met Met Ala Met Pro Leu Cys Arg Tyr Arg Leu Asn His Phe
               165
                                    170
Phe Cys Glu Met Pro Val Phe Leu Lys Leu Ala Cys Lys Asp Thr Ala
           180
                                185
                                                    190
Gly Thr Glu Ala Lys Met Phe Val Ala Arg Ala Ile Ile Leu Val Phe
       195
                            200
Pro Ala Thr Leu Ile Leu Gly Ser Tyr Ala His Ile Ala Arg Ala Val
                        215
                                            220
Leu Lys Val Lys Ser Thr Ser Gly Arg Arg Lys Ala Phe Gly Thr Cys
                    230
                                        235
                                                            240
Gly Ser His Leu Leu Val Val Ser Met Phe Tyr Gly Ser Thr Ile Tyr
                245
                                    250
Thr Tyr Leu Gln Pro Asn Asp Ser Tyr Ser Glu Asn Glu Gly Lys Phe
                                265
                                                    270
Val Ala Leu Phe Tyr Thr Ile Val Thr Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Val Leu
                        295
Gly Arg Gly Thr Asp Ser Arg
<210> 1970
<211> 311
<212> PRT
<213> Mus musculus
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Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Val Leu

```
<400> 1970
Met Gly Thr Phe Asn Phe Ser Ser Asp Arg Ala Phe Phe Leu Val Gly
                                    10
Phe Ser Asp Trp Pro His Leu Glu Leu Val Phe Phe Val Ala Ile Ser
            20
Ile Phe Tyr Ser Leu Thr Leu Phe Gly Asn Ser Ser Ile Ile Ala Leu
Ser Arg Leu Asp Leu Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Cys
His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln
                    70
                                         75
Leu Leu Ile Asn Leu His Gly Gln Asp Arg Thr Ile Ser Tyr Glu Arg
                                     90
Cys Val Ala Gln Leu Leu Ile Phe Leu Ala Leu Ala Ser Thr Glu Cys
            100
                                 105
Val Leu Leu Gly Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg
                            120
Pro Leu His Tyr Thr Thr Ile Met His Pro Gln Leu Cys His Thr Leu
                        135
Ala Ile Ser Ser Trp Val Gly Gly Leu Val Asn Ser Leu Thr Gln Thr
                    150
                                         155
Gly Leu Met Met Val Met Pro Leu Cys Gly Tyr Arg Leu Asn His Phe
                                     170
                165
Phe Cys Glu Met Pro Ile Phe Leu Lys Leu Ala Cys Glu Glu Thr Lys
                                 185
                                                     190
Arg Thr Glu Ala Lys Met Phe Val Ala Arg Thr Ile Val Leu Val Cys
        195
                            200
Pro Ala Ala Leu Ile Leu Gly Ser Tyr Ala His Ile Thr Arg Ala Val
                        215
Leu Lys Val Lys Ser Thr Ala Gly Arg Arg Lys Ala Phe Gly Thr Cys
                    230
                                         235
Gly Ser His Ile Leu Val Val Ser Leu Phe Tyr Gly Ser Ala Ile Tyr
                245
                                     250
Thr Tyr Leu Gln Pro Thr His Thr Tyr Ser Glu Ser Glu Gly Lys Phe
                                 265
Val Ala Leu Phe Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Val Leu
                        295
Gly Arg Gly Thr Asp Ser Glu
305
<210> 1971
<211> 313
<212> PRT
<213> Mus musculus
<400> 1971
Met Met Gln Trp Asn Asn Trp Thr Arg Asn Ser Asp Phe Ile Leu Leu
                                    10
Gly Phe Phe Asp His Ser Pro Leu His Thr Phe Phe Phe Ser Leu Ile
            20
Leu Ala Ile Phe Phe Met Ala Leu Ile Gly Asn Ser Val Met Val Ile
                            40
Leu Ile Tyr Leu Asp Ala Gln Leu His Thr Pro Met Tyr Ile Leu Leu
                        5.5
Ser Gln Leu Ser Leu Met Asp Leu Met Leu Ile Ser Thr Thr Val Pro
```

```
Gln Thr Ala Phe Asn Phe Leu Ser Gly Asn Lys Ser Ile Ser Met Ala
Gly Cys Gly Val Gln Ile Phe Phe Tyr Val Ser Leu Leu Gly Ala Glu
            100
                                105
                                                    110
Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
Tyr Pro Leu Arg Tyr Pro Ile Leu Met Ser His Lys Ile Cys Ser Leu
                        135
Met Ala Ala Phe Ser Trp Ile Leu Gly Ser Leu Asp Gly Ile Ile Asp
                    150
Val Ala Ala Val Leu Ser Phe Ser Tyr Cys Gly Thr Arg Glu Ile Pro
                                    170
                165
His Phe Phe Cys Asp Ile Pro Ala Leu Leu Thr Ile Ser Cys Ser Asp
            180
                                185
                                                    190
Thr Leu Ile Phe Glu Lys Ile Ile Phe Phe Cys Cys Val Ile Met Leu
                            200
Ile Phe Pro Val Val Ile Val Ile Ala Ser Tyr Ile Cys Val Ile Leu
                        215
                                            220
Ala Val Ile Lys Met Ala Ser Ala Glu Ser Arg His Lys Ala Phe Ala
                                        235
                    230
Thr Cys Ser Ser His Val Met Val Val Ile Tyr Tyr Gly Ala Ala
                245
                                    250
Met Phe Ile Tyr Met Gln Pro Ser Ser Ser Arg Ser Pro Asn Gln Asp
            260
                                265
Lys Leu Val Ser Ala Phe Tyr Thr Ile Leu Thr Pro Leu Leu Asn Pro
                            280
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Ala Arg Ala Phe Met Lys
                        295
                                            300
Val Leu Arg Met Asp Lys Ala Ala Gly
                    310
```

```
<210> 1972
```

<400> 1972

Met Gln Ile Ser Ser Ser Ile Ile Ser Pro Arg Met Asn Cys Ser Gln Ala Pro Gly Phe Ile Leu Leu Gly Leu Pro Arg Glu Pro Glu Lys Trp 20 Gln His Phe Phe Ile Ile Phe Leu Gly Leu Tyr Leu Leu Gly Leu Leu Gly Asn Leu Leu Leu Leu Ala Ile Gly Ser Asp Val His Leu His 55 Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser Leu Val Asp Leu Cys 70 Phe Ile Thr Thr Ala Pro Lys Thr Leu Glu Thr Trp Trp Thr Gly 90 Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu Thr Gln Leu Tyr Phe Phe 100 105 110 Gly Val Phe Ala Asp Met Asp Asn Leu Leu Leu Ala Val Met Ala Ile 120 125 Asp Arg Tyr Ala Ala Ile Cys His Pro Leu Leu Tyr Pro Leu Leu Met 130 135 140 Thr Pro Cys Arg Cys Glu Val Leu Val Ser Gly Ser Trp Gly Ile Ala 150 155 His Cys Val Ser Leu Met Tyr Thr Leu Leu Ser Gln Leu Tyr Phe

<211> 320

<212> PRT

<213> Mus musculus

```
165
                                    170
His Thr Asn Gln Glu Ile Pro His Phe Phe Cys Asp Cys Arg Pro Leu
                                                    190
                                185
Leu Leu Ser Cys Ser Asp Thr His Leu Asn Glu Val Leu Met Met
                            200
Ala Leu Ala Gly Val Leu Gly Val Ser Ala Val Leu Cys Ile Val Ser
                        215
Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala Arg Val Pro Ser Ala Gln
                    230
                                        235
Gly Lys Arg Lys Ala Leu Thr Thr Cys Ser Ser His Leu Ser Val Val
                                    250
Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr Tyr Leu Lys Pro Pro Ser
                                265
Thr Ser His Ser Ser Gly Glu Val Val Ala Ala Val Met Tyr Thr Leu
Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp
                        295
Val Lys Ser Ser Leu Arg Arg Val Leu Asn Ile Glu Lys Ser Gln Asp
                    310
<210> 1973
<211> 321
<212> PRT
<213> Mus musculus
```

<400> 1973 Met Trp Ile His Leu Glu Phe Met Glu Asn His Lys Asn Val Thr Glu Phe Ile Phe Met Gly Leu Trp Gln Asn Arg Gln Ile Glu Leu Leu Phe Phe Leu Leu Phe Leu Cys Tyr Leu Ala Ile Leu Met Gly Asn Ser 40 Val Ile Leu Phe Thr Ile Thr Tyr Ser His Leu Ile Glu Gln Pro Met Tyr Tyr Phe Leu Cys His Leu Ser Leu Met Asp Leu Cys Tyr Thr Ser 75 Thr Val Ile Pro Arg Leu Val Arg Asp Leu Ala Thr Thr Arg Lys Asn Ile Ser Tyr Asn Glu Cys Met Thr Gln Leu Phe Thr Ala His Leu Leu 105 Ala Gly Val Glu Ile Phe Ile Leu Val Ser Met Ala Leu Asp Arg Tyr 120 125 Val Ala Ile Val Lys Pro Leu His Tyr Met Val Ile Met Ser Arg Lys 135 140 Arg Cys Asp Met Leu Ile Val Thr Ala Trp Ile Leu Gly Phe Trp His 150 155 Ser Ile Ala Leu Leu Met Val Leu Ser Leu Pro Phe Cys Gly Pro 170 175 Asn His Ile Asn His Tyr Leu Cys Asp Ile Lys Pro Leu Leu Lys Leu 185 190 Val Cys Lys Asp Val His Val Val Ser Ile Leu Ala Ile Ala Asn Ser 195 Gly Met Val Leu Phe Ala Ile Phe Ile Val Leu Leu Ala Ser Tyr Ile 210 215 Leu Ile Leu Tyr Ser Leu Arg Thr Arg Ser Ser Ala Gly Lys Arg Lys 225 230 235 Ala Leu Ser Thr Cys Ser Ser His Ile Met Val Val Leu Phe Phe 245 250

Gly Pro Cys Ile Tyr Ile Tyr Ile Leu Pro Ala Gly Ser Glu Asn Lys 260 265 270

Asp Lys Glu Ile Ser Val Phe Tyr Thr Val Ile Ala Pro Met Leu Asn 280 285

Pro Leu Ile Tyr Thr Leu Arg Asn Ser Glu Met Lys Ser Ala Met His 290

Lys Val Trp Ser Arg Leu Ser Leu Arg Val Glu Val Ser Glu Arg Ile 305 310 315 320

Leu <210> 1974 <211> 309 <212> PRT <213> Mus musculus <400> 1974 Met Glu Ile Lys Asn Asn Val Thr Glu Phe Val Leu Leu Gly Leu Thr 10 Gln Asn Pro Gln Leu Gln Lys Ile Leu Phe Val Val Phe Leu Val Ile 25 Tyr Val Phe Ser Val Ala Gly Asn Leu Leu Ile Leu Ile Thr Ile Thr Asn Ser Gln Leu Leu Gly Tyr Pro Met Tyr Tyr Phe Leu Ala Tyr Leu Ser Phe Ile Asp Ala Cys Tyr Ser Ser Val Asn Thr Pro Lys Leu Leu 70 Ala Asp Thr Phe His Lys Arg Lys Ser Ile Lys Phe Asn Gly Cys Met 90 95 Thr Gln Val Phe Ala Glu His Phe Ile Gly Gly Thr Glu Val Ile Leu 105 Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Ala Thr Ile Met Asn Arg Arg Leu Cys Asn Ile Leu Val Gly 130 135 Val Ser Trp Val Gly Gly Phe Leu His Gly Gly Ile Gln Ile Leu Phe 150 155 Ile Ile Gly Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met 165 170 Cys Asp Leu Asn Pro Leu Leu Asp Leu Ala Cys Ile Asp Thr His Ile 185 190 Leu Gly Leu Phe Val Ala Ala Asn Ser Gly Phe Ile Cys Leu Leu Asn 195 200 205 Phe Leu Leu Leu Val Ser Tyr Leu Val Ile Leu Asn Ser Leu Arg 215 220 Ser His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Val Ser 230 235 His Ile Thr Val Val Val Leu Phe Phe Val Leu Cys Ile Phe Val Tyr 245 250 Met Arg Pro Ala Ala Thr Leu Pro Ile Asp Lys Ala Val Ala Leu Phe 260 265 270 Tyr Thr Met Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg 280 285 Asn Ala Gln Met Lys Asn Ala Ile Trp Lys Leu Phe Ser Val Lys Val 295 300 290

Gln Ser Asp Asp Lys 305

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<211> 309
<212> PRT
<213> Mus musculus
<400> 1975
Met Glu Ile Lys Asn Asn Val Thr Glu Phe Val Leu Leu Gly Leu Thr
               5
                                    1.0
Gln Asn Leu His Leu Gln Lys Ile Val Phe Val Val Phe Leu Val Ile
            20
                                25
Tyr Val Phe Ser Val Val Gly Asn Leu Leu Ile Val Ile Thr Ile Thr
                            40
Asn Ser Gln Leu Leu Gly Tyr Pro Met Tyr Tyr Phe Leu Ala Tyr Leu
                        55
Ser Phe Ile Asp Ala Cys Tyr Ser Ser Val Asn Thr Pro Lys Val Ile
                    70
                                        75
Ala Asp Ser Leu His Lys Arg Lys Ser Ile Lys Phe Asn Gly Cys Met
                                    90
                                                         95
               85
Thr Gln Val Phe Ala Glu His Phe Ile Gly Gly Thr Glu Val Ile Leu
                                105
                                                    110
            100
Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
        115
His Tyr Ala Thr Ile Met Asn Arg Gln Leu Cys Asn Ile Leu Val Gly
   130
                        135
                                            140
Val Ser Trp Val Gly Gly Phe Leu His Gly Gly Ile Gln Ile Leu Phe
                    150
                                        155
Ile Ile Gly Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met
                                    170
                                                         175
               165
Cys Asp Leu Asn Pro Leu Leu Asp Leu Ala Cys Ile Asp Thr His Ile
           180
                                185
                                                    190
Leu Gly Leu Phe Val Ala Ala Asn Ser Gly Phe Ile Cys Leu Leu Asn
                                                205
        195
                            200
Phe Leu Leu Leu Val Ser Tyr Leu Val Ile Leu Asn Ser Leu Arg
                                            220
                        215
Ser His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Val Ser
                    230
                                        235
His Ile Thr Val Val Val Leu Phe Phe Val Pro Cys Ile Phe Val Tyr
                245
                                    250
                                                         255
Met Arg Pro Val Ala Thr Leu Pro Ile Asp Lys Ala Val Thr Leu Phe
                                265
            260
Tyr Thr Met Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                                                285
                            280
Asn Ala Gln Met Lys Asn Ala Ile Trp Lys Leu Phe Ser Val Lys Val
                        295
Gln Ser Asp Asp Lys
305
<210> 1976
<211> 310
<212> PRT
<213> Mus musculus
<400> 1976
Met Trp Leu Asn Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
1
                5
                                    10
Gln Asp Pro Phe Arg Lys Lys Ile Leu Phe Val Val Phe Leu Leu Phe
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<210> 1975

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Tyr Met Gly Thr Leu Leu Gly Asn Leu Leu Ile Ile Ala Thr Ile Lys
Thr Ser Gln Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Phe Tyr Leu
Ser Leu Ser Asp Thr Cys Phe Ser Thr Thr Ile Ala Pro Arg Thr Ile
                    70
Val Asp Ser Leu Leu Asn Glu Ala Ser Ile Ser Phe Thr Glu Cys Ile
                                    90
Ile Gln Val Phe Thr Phe His Phe Phe Gly Cys Leu Glu Ile Phe Ile
                                105
Leu Ile Leu Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
His Tyr Met Thr Ile Met Ser Arg Arg Val Cys Gly Val Leu Val Ala
                                            140
                        135
Ile Ala Trp Val Gly Ser Cys Val His Ser Leu Val Gln Ile Phe Leu
                    150
Ala Leu Ser Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp His Tyr Phe
                165
                                    170
Cys Asp Leu Gln Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Leu
Ile Asn Leu Leu Val Ser Asn Ser Gly Ala Ile Cys Thr Val Ser
                            200
Phe Leu Met Leu Ile Val Ser Tyr Val Ile Ile Leu Arg Ser Leu Arg
Asn His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ile Ser
                    230
His Ile Ile Val Val Ile Leu Phe Phe Gly Pro Cys Ile Phe Ile Tyr
                                    250
Thr Arg Pro Ala Thr Thr Phe Pro Met Asp Lys Met Ile Ala Ile Phe
                                265
Tyr Ser Ile Gly Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp Arg Lys Lys Val
                       295
Val Ser Asp Asp Arg Lys
```

<210> 1977 <211> 318

<212> PRT

<213> Mus musculus

<400> 1977

 Met
 Ala
 Ser
 Arg
 Thr
 Tyr
 Ser
 Met
 Glu
 Glu
 Val
 Asn
 Asn
 Val
 Thr
 Glu

 Phe
 Ile
 Phe
 Leu
 Gly
 Leu
 Ser
 Gln
 Asn
 Pro
 Glu
 Val
 Glu
 Lys
 Val
 Cys
 Cys
 Ser
 Fro
 Glu
 Val
 Glu
 Lys
 Val
 Cys
 Ser
 Glu
 Val
 Ile
 Leu
 Glu
 Lys
 Val
 Cys
 Cys
 Ser
 Glu
 Val
 Ile
 Leu
 Glu
 Lys
 Asn
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Asn
 Leu
 Leu
 Leu
 Tyr
 Met
 Leu
 Asn
 Leu
 Leu

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120
        115
Val Ala Ile Cys Lys Pro Leu His Tyr Met Thr Ile Met Asp Arg Glu
                        135
                                             140
Arg Cys Asn Lys Met Leu Leu Gly Thr Trp Ile Gly Gly Phe Leu His
                    150
                                        155
Ser Ile Ile Gln Val Ala Leu Val Val Gln Leu Pro Phe Cys Gly Pro
                                    170
                                                         175
Asn Glu Ile Asp His Tyr Phe Cys Asp Val His Pro Val Leu Lys Leu
                                185
                                                     190
Ala Cys Thr Asp Thr Tyr Ile Val Gly Ile Phe Val Thr Ala Asn Ser
                            200
Gly Thr Ile Ala Leu Gly Ser Phe Val Ile Leu Leu Ile Ser Tyr Thr
                        215
                                            220
Val Ile Leu Met Ser Leu Arg Lys Gln Ser Ser Glu Gly Arg Arg Lys
                    230
                                        235
                                                             240
Ala Leu Ser Thr Cys Gly Ser His Ile Ala Val Val Ile Ile Phe Phe
                245
                                    250
Gly Pro Cys Thr Phe Met Tyr Met Arg Pro Asp Thr Thr Phe Ser Glu
                                265
Asp Lys Met Val Ala Thr Phe Tyr Thr Ile Ile Thr Pro Met Leu Asn
                            280
                                                 285
Pro Leu Ile Tyr Thr Leu Arg Asn Ala Glu Val Lys Asn Ala Met Arg
                        295
                                            300
Lys Leu Trp Ala Arg Lys Phe Ser Trp Glu Thr Thr Gly Lys
                    310
<210> 1978
<211> 312
<212> PRT
<213> Mus musculus
<400> 1978
Met Gln Asn Gln Thr Ile Val Thr Glu Phe Val Leu Leu Gly Leu Ser
                                    10
Gln Asn Pro Lys Val Glu Lys Leu Leu Phe Val Ile Phe Leu Leu
            20
                                25
Tyr Leu Ala Thr Ile Gly Gly Asn Met Thr Ile Val Val Thr Ile Ala
                                                 45
Ser Ser Pro Val Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe
                        55
Leu Ser Leu Leu Asp Ala Cys Val Ser Ser Ile Val Thr Pro Lys Met
                    70
                                        75
Ile Ile Asp Leu Phe Tyr Lys Arg Lys Thr Ile Ser Phe Glu Cys Cys
                                    90
Met Met Gln Val Phe Ser Val His Phe Phe Ser Ala Val Glu Val Ile
                                105
                                                    110
Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
                                                 125
Leu His Tyr Ser Ser Ile Met Asn Arg Arg Leu Cys Gly Ile Leu Val
                        135
                                            140
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Gly Ile Ala Phe Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile

Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Phe Ile Asp His Phe

Ile Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His

Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile

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      Ile Phe Ser Phe Leu 210
      Leu Val Ser Tyr Val Val Ile Leu Phe Ser Leu 210

      Arg Thr His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly 235

      220

      Ser His Ile Thr Val Val Val Val Leu Phe Phe Val Pro Cys Ile Leu Ile 245

      Tyr Ala Arg Pro Thr Ser Pro Phe Ser Leu Glu Lys Asn Val Phe Ile 260

      Phe Ala Asp Val Leu Thr Pro Leu Leu Asn Pro Val Val Tyr Thr Phe 275

      Arg Asn Lys Glu Met Lys Asn Ala Ile Arg Lys Met Trp Arg Ser Leu 290

      Leu Val Ala Pro Asp Ile Leu Lys 305
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<210> 1979 <211> 310 <212> PRT

<213> Mus musculus

<400> 1979 Met Gln Leu Asn Ile Asn Val Thr Glu Val Ile Leu Leu Gly Leu Thr 1 10 Gln Asp Pro Ser Arg Lys Asn Ile Val Phe Ala Ile Phe Leu Leu Phe 25 Tyr Met Gly Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Thr Val Lys 40 Thr Ser Gln Ala Leu Gly Ser Pro Met Tyr Phe Phe Leu Phe Tyr Leu 55 Ser Leu Ser Asp Thr Cys Phe Ser Thr Thr Val Ala Pro Arg Thr Ile 70 7.5 Val Asp Ser Leu Gln Lys Glu Ala Ser Ile Ser Phe Thr Glu Cys Ile 90 8.5 Ile Gln Ile Phe Thr Phe His Phe Gly Cys Leu Glu Ile Phe Ile 100 105 110 Leu Ile Leu Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Met Thr Ile Met Ser Arg Arg Val Cys Gly Val Leu Val Ala 135 140 Ile Ala Trp Met Gly Ser Cys Val His Ser Leu Val Gln Ile Phe Leu 150 155 Ala Leu Ser Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe 165 170 175 Cys Asp Leu Gln Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Leu 180 185 190 Ile Asn Leu Leu Val Ser Asn Ser Gly Ala Ile Cys Thr Val Ser 195 200 205 Phe Leu Val Leu Met Phe Ser Tyr Val Ile Ile Leu His Ser Leu Arg 215 220 Asn His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ile Ser 230 235 His Ile Ile Val Val Ile Leu Phe Phe Gly Pro Cys Ile Phe Ile Tyr 245 250 Thr Arg Pro Ala Thr Thr Phe Pro Met Asp Lys Met Ile Ser Ile Phe 265 270 Tyr Ser Ile Gly Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg

Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp Arg Lys Lys Ile

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295
                                            300
    290
Val Ser Asp Asp Lys Lys
305
                    310
<210> 1980
<211> 308
<212> PRT
<213> Mus musculus
<400> 1980
Met Ala Trp Ser Asn His Ser Val Ile Thr Glu Phe Val Leu Thr Gly
                                    10
Leu Ser Asp Asp Pro Leu Ile Pro Ala Leu Leu Phe Ala Leu Phe Leu
            20
                                25
Gly Ile Tyr Val Leu Thr Met Thr Gly Asn Leu Thr Met Leu Leu Val
        35
                            40
Ile Thr Ala Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
Asn Leu Ser Phe Val Asp Leu Cys Phe Ser Ser Val Thr Val Pro Lys
                    70
                                        75
Leu Leu Lys Asp Leu Leu Ser Ala Lys Lys Thr Ile Ser Ile Glu Gly
                85
                                    90
Cys Leu Ala Gln Val Phe Phe Val Phe Phe Ser Ser Gly Thr Glu Ala
                                105
                                                     110
Cys Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys His
                            120
Pro Leu Leu Tyr Gly Gln Val Met Arg Asn Glu Leu Cys Val Arg Leu
                        135
                                            140
Val Val Ile Ser Trp Gly Val Ala Ser Leu Asn Ala Thr Ile Ile Val
                    150
                                        155
Leu Leu Ala Val Asn Leu Asp Phe Cys Gly Ala Gln Thr Ile His His
                                    170
Tyr Thr Cys Glu Leu Pro Ala Leu Phe Pro Leu Ser Cys Ser Asp Ile
                                185
Ser Ile Thr Val Val Val Leu Leu Cys Ser Ser Leu Leu His Gly Leu
        195
                            200
Gly Thr Phe Ile Pro Ile Phe Phe Ser Tyr Ala Arg Ile Val Ser Ala
                        215
                                            220
Ile Leu Ser Ile Ser Ser Thr Thr Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                         235
Cys Ser Ser His Leu Ala Ala Val Thr Leu Phe Phe Gly Ser Gly Phe
                                                         255
                                    250
Leu Cys Tyr Leu Met Pro Pro Ser Gly Ser Ser Leu Asp Leu Leu Leu
                                265
Ser Leu Gln Tyr Ser Ala Val Thr Pro Met Leu Asn Pro Leu Ile Tyr
                            280
Ser Leu Lys Asn Gln Glu Val Lys Ala Ala Val Gln Arg Thr Leu Arg
    290
                        295
                                             300
Lys Tyr Leu Leu
305
<210> 1981
<211> 306
<212> PRT
<213> Mus musculus
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<400> 1981

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Met Val Asn Gln Ser Ser Pro Val Val Phe Phe Met Leu Gly Phe Ser
Glu His Pro Gln Leu Glu Lys Val Leu Phe Val Val Leu Cys Ser
                                25
Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu Ile Leu Leu Ser Thr
Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu
Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr Cys Val Pro Gln Met Leu
                                        75
Phe Asn Leu Trp Gly Pro Ala Lys Thr Ile Ser Phe Leu Gly Cys Phe
Val Gln Leu Phe Ile Phe Met Ser Leu Gly Thr Thr Glu Cys Ile Leu
           100
                                105
Leu Thr Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu
                            120
                                                125
His Tyr Ala Thr Lys Ile Asn Pro His Leu Cys Arg Gln Leu Ala Gly
    130
                        135
Ile Ala Trp Ala Ile Gly Leu Val Gln Ser Ile Val Gln Thr Pro Pro
                    150
                                        155
Thr Leu Lys Leu Pro Phe Cys Ser Tyr Arg Gln Ile Asp Asn Phe Leu
               165
                                    170
Cys Glu Val Pro Ser Leu Ile Gln Leu Ser Cys Gly Asp Thr Thr Tyr
           180
                                185
                                                    190
Asn Glu Ile Gln Met Ala Val Ala Ser Ile Phe Ile Val Val Pro
                            200
Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Ala Arg Ala Val Leu
                        215
Lys Ile Ser Ser Ala Lys Gly Arg Arg Lys Ala Phe Gly Thr Cys Ser
                    230
                                        235
Ser His Leu Ile Val Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val
                245
                                    250
Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Arg Glu Arg Gly Lys Phe Phe
                                265
                                                    270
           260
Gly Leu Phe Tyr Ala Val Gly Thr Pro Thr Leu Asn Pro Leu Val Tyr
                            280
Thr Leu Arg Asn Lys Gly Gly Lys Lys Ser Ile Leu Glu Ala Ala Lys
                        295
Glu Arg
305
```

<210> 1982

<211> 314

<212> PRT

<213> Mus musculus

<400> 1982

 Met Gly Gln Arg
 Ser Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr 1
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Thr Gln Leu Phe Leu Glu His Leu Leu Gly Gly Ala Glu Val Phe Leu
           100
                                105
Leu Met Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
       115
                                                125
His Tyr Leu Ile Ile Met Asn Arg Arg Val Cys Phe Leu Leu Val
                       135
                                            140
Val Ser Trp Ala Gly Gly Leu Ala His Ser Val Ala Gln Leu Leu Phe
                    150
                                        155
Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ile
               165
                                    170
Cys Asp Met Tyr Pro Leu Leu Gly Leu Ala Cys Thr Asp Thr His Ile
           180
                                185
                                                    190
Ile Gly Leu Thr Val Val Ala Asn Gly Gly Ala Ile Cys Met Leu Val
       195
                            200
                                                205
Phe Ile Ile Leu Ile Ile Ser Tyr Gly Ile Ile Leu Arg Ser Leu Lys
                        215
                                            220
Thr His Ser Gln Glu Gly Arg Gln Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Ile Met Val Val Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
                                    250
                245
Val Arg Pro Val His Asn Phe Pro Ile Asp Lys Ser Ile Thr Val Phe
           260
                                265
Tyr Thr Ile Val Thr Pro Ile Leu Asn Pro Leu Ile Tyr Ala Leu Arg
                            280
                                                285
Asn Ser Glu Met Lys Arg Ser Met Glu Asn Leu Leu Tyr Lys Val Phe
                        295
Pro Arg Asp Lys Ile Thr Met Ser Phe His
                    310
```

<210> 1983

<211> 313

<212> PRT

<213> Mus musculus

<400> 1983

Met Glu Leu His Ser Pro Pro Ser Asn Val Thr Glu Phe Val Leu Leu Gly Leu Thr Gln Asn Pro Arg Leu Gln Lys Ile Leu Phe Ile Val Phe Leu Phe Val Phe Leu Phe Thr Val Leu Ala Asn Leu Leu Ile Val Leu 4.5 Thr Ile Ser Phe Ser Pro Thr Leu Ser Ala Pro Met Tyr Phe Phe Leu Thr Tyr Leu Ser Phe Ile Asp Ala Phe Tyr Thr Ser Val Thr Thr Pro Lys Met Ile Ile Asp Leu Leu Tyr Gln Arg Arg Thr Ile Ser Leu Ala Gly Cys Leu Thr Gln Leu Phe Val Glu His Phe Leu Gly Gly Ser Glu Ile Ile Leu Leu Ile Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Met Thr Ile Met Arg Gln Gly Leu Cys Arg Leu Leu Val Val Ala Trp Ile Gly Gly Ile Leu His Ala Thr Met Gln Ile Phe Phe Met Ile Asn Leu Pro Phe Cys Gly Pro Asn Val Ile Asp

```
His Phe Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Arg Asp
Thr His Lys Leu Gly Ile Ile Val Ala Ala Asn Ser Gly Ala Met Cys
       195
                            200
Phe Leu Ile Phe Thr Met Leu Leu Ile Ser Tyr Ile Val Ile Leu Arg
                        215
Ser Leu Lys Ser His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr
                    230
                                        235
Cys Gly Ser His Phe Thr Val Val Val Leu Phe Phe Val Pro Cys Ile
               245
                                    250
Phe Thr Tyr Met Arg Pro Val Thr Thr Tyr Pro Val Asp Lys Leu Val
                                265
                                                    270
Thr Val Phe Phe Ala Ile Leu Thr Pro Met Leu Asn Pro Ile Ile Tyr
                            280
Thr Ala Arg Asn Thr Glu Val Lys Asn Ala Met Arg Asn Leu Leu Lys
                        295
Arg Gln Val Thr Tyr Pro Val Leu Lys
                    310
```

<210> 1984 <211> 316 <212> PRT

<213> Mus musculus

<400> 1984 Met Glu Pro Trp Asn Ser Thr Leu Gly Ser Gly Phe Ile Leu Val Gly 10 Ile Leu Asp Gly Ser Gly Ser Pro Glu Leu Leu Cys Ala Thr Ile Ala 20 25 Ala Leu Tyr Met Leu Ala Leu Ile Ser Asn Gly Met Leu Ile Leu Val 40 Ile Thr Met Asp Ile Tyr Leu His Val Pro Met Tyr Leu Leu Glu 55 Gln Leu Ser Leu Met Asp Leu Leu Leu Ala Ser Val Ile Ser Pro Lys 70 75 Ala Val Met Asp Phe Leu Leu Lys Asp Asn Thr Ile Thr Phe Gly Gly 90 85 Cys Ala Leu Gln Met Phe Leu Glu Leu Ala Leu Gly Ser Ala Glu Asp 100 105 Leu Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 125 Pro Leu Asn Tyr Met Ile Phe Met Arg Pro Ser Ile Cys Trp Leu Met 135 140 Val Ala Ile Ser Trp Ile Pro Ala Ser Leu Ser Ala Leu Gly Tyr Thr 150 155 Ile Tyr Thr Met Gln Tyr Pro Phe Cys Lys Ser Arg Glu Ile Arg His 165 170 Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr 180 185 Ser Arg Tyr Gln Leu Met Val Tyr Leu Met Gly Val Thr Leu Leu Ile 195 200 Pro Pro Leu Ala Ala Ile Leu Ala Ser Tyr Ser Leu Ile Leu Phe Thr 215 220 Val Leu Lys Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr 230 235 Cys Ser Ser His Leu Thr Val Val Gly Met Tyr Tyr Gly Pro Leu Thr 250 Val Met Tyr Ile Leu Pro Ser Ser Tyr His Ser Ser Lys Gln Glu Asn

260 Ile Leu Ser Phe Leu Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Glu Val Ser Gly Ala Leu Lys Arg Val 295 Leu Gly Lys Arg Leu Leu Ser Thr His Pro Asn Phe 310 <210> 1985 <211> 315 <212> PRT <213> Mus musculus <400> 1985 Met Glu Val Cys Asn Ser Thr Leu Gly Ser Gly Phe Ile Leu Val Gly 1 10 Ile Leu Asp Asp Ser Gly Phe Pro Glu Leu Leu Cys Ala Thr Ile Thr 25 Ala Leu Tyr Phe Leu Ala Ile Thr Ser Asn Gly Leu Leu Leu Val 35 40 Ile Thr Met Asp Ala Arg Leu His Val Pro Met Tyr Leu Leu Trp 55 Gln Leu Ser Leu Met Asp Leu Leu Thr Ser Val Ile Thr Pro Lys 70 75 Ala Ile Leu Asp Tyr Leu Leu Lys Asp Asn Thr Ile Ser Phe Gly Gly 85 90 Cys Ala Leu Gln Met Phe Leu Glu Leu Thr Leu Gly Ser Ala Glu Asp 105 Leu Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 125 Pro Leu Asn Tyr Thr Ile Leu Met Ser Gln Lys Val Cys Cys Leu Met 135 140 Ile Ala Thr Ser Trp Ile Leu Ala Ser Leu Ser Ala Leu Gly Tyr Ser 150 155 Ile Tyr Thr Met Gln Tyr Pro Phe Cys Lys Ser Arg Gln Ile Arg His 165 170 175 Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr 180 185 190 Ser Thr Tyr Glu Leu Met Val Tyr Val Met Gly Val Thr Leu Leu Ile 195 200 Pro Pro Leu Ala Ala Ile Leu Ala Ser Tyr Ser Leu Ile Leu Phe Thr 215 220 Val Leu His Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr 230 235 Cys Ser Ser His Leu Thr Val Val Gly Met Trp Tyr Gly Gly Ala Ile 250 Val Met Tyr Val Leu Pro Ser Ser Phe His Ser Pro Lys Gln Asp Asn 265 Ile Ser Ser Val Phe Tyr Thr Ile Phe Thr Pro Ala Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Arg Arg Val 295 Leu Gly Lys Arg Phe Ser Val Gln Ser Thr Phe

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Asn Leu Ser Phe Ile Asp Leu Gly Val Ser Cys Val Thr Cys Pro Lys
                                        75
                                                             80
                    70
Met Ile Tyr Asp Leu Phe Arg Lys His Lys Val Ile Ser Phe Arg Gly
               85
                                    90
Cys Ile Thr Gln Ile Phe Phe Ile His Val Ile Gly Gly Val Glu Val
                                105
                                                     110
Val Leu Leu Ile Gly Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu His Tyr Leu Thr Ile Met Asn Ala Lys Met Cys Ile Phe Ile
                        135
                                             140
Leu Val Ser Ala Trp Val Val Gly Leu Met His Ser Leu Val Gln Phe
                    150
                                         155
Val Tyr Ile Val Asn Leu Pro Phe Cys Gly Pro Asn Ile Leu Asp Ser
                                    170
                                                         175
Phe Tyr Cys Asp Leu Pro Arg Phe Ile Arg Leu Ala Cys Val Asp Thr
                                185
                                                     190
            180
Asn Gln Leu Glu Leu Met Val Ser Ala Asn Ser Gly Phe Ile Ser Val
                            200
                                                 205
        195
Gly Ser Phe Phe Ile Leu Val Ile Ser Tyr Ile Val Ile Ile Val Thr
                        215
Val Gln Lys His Ser Ser Ser Gly Ser Ser Lys Ala Leu Ser Thr Leu
                    230
                                         235
Ser Ala His Ile Ser Val Val Val Leu Phe Phe Gly Pro Leu Ile Phe
                                     250
                245
Val Tyr Thr Trp Pro Ser Pro Ser Thr His Leu Asp Lys Tyr Leu Ala
                                265
                                                     270
            260
Ile Phe Asp Ala Val Gly Thr Pro Phe Leu Asn Pro Val Ile Tyr Thr
        275
                            280
Leu Arg Asn Gln Asp Met Lys Thr Ala Met Lys Arg Val Cys Arg Gln
                                             300
                        295
Leu Leu Lys Tyr Gly Lys Ile Ser
                    310
<210> 1988
<211> 312
<212> PRT
<213> Mus musculus
<400> 1988
Met Gly Glu Ala Asn Cys Ser Val Val Ser Glu Phe Val Phe Leu Gly
                                     10
Leu Ser Asn Ser Trp Ala Ile Gln Leu Phe Leu Phe Phe Phe Ser Cys
                                 25
Ile Phe Tyr Val Ala Ser Leu Leu Gly Asn Phe Leu Ile Val Leu Thr
        35
Val Thr Ser Asp Pro Gln Leu Gln Ser Pro Met Tyr Phe Leu Leu Gly
                                             60
                        55
Asn Leu Ser Ile Ile Asp Leu Ile Phe Cys Ser Ser Thr Thr Pro Lys
                    70
                                         75
                                                             80
Met Ile Tyr Asp Leu Phe Arg Arg His Lys Thr Ile Ser Phe Gly Gly
                85
                                    90
                                                         95
Cys Ile Thr Gln Ile Phe Phe Ile His Ala Val Gly Gly Thr Glu Met
            100
                                105
                                                     110
Val Leu Leu Ile Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys
                            120
                                                 125
        115
Pro Leu His Tyr Leu Thr Ile Met Ser Pro Gln Lys Cys Ile Leu Ile
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Leu Val Ala Ser Trp Ile Ile Gly Phe Ile His Ser Val Thr Gln Leu
                    150
Ser Phe Val Val Asp Leu Pro Phe Cys Gly Pro Asn Glu Leu Asp Ser
               165
                                    170
                                                        175
Phe Phe Cys Asp Leu Pro Arg Phe Ile Lys Leu Ala Cys Val Asp Thr
                                185
                                                    190
            180
Tyr Thr Leu Gly Phe Met Val Thr Ala Asn Ser Gly Phe Ile Ser Val
                            200
Ala Ser Phe Leu Ile Leu Ile Ile Ser Tyr Ile Phe Ile Leu Val Thr
                        215
                                            220
Val Gln Lys Lys Ser Leu Gly Ser Leu Gly Lys Ala Leu Ser Thr Leu
                    230
                                        235
Ser Ala His Val Ile Val Val Leu Phe Phe Gly Pro Leu Ile Phe
                                    250
Phe Tyr Thr Trp Pro Phe Pro Thr Ser His Leu Asp Lys Phe Leu Ala
                                265
                                                    270
Ile Phe Asp Ala Val Ile Thr Pro Phe Leu Asn Pro Val Ile Tyr Thr
                            280
Leu Arg Asn Lys Glu Met Lys Val Ala Met Arg Arg Leu Cys Ser Gln
                        295
                                            300
Phe Val Asn Tyr Asn Lys Ile Ser
                    310
```

<210> 1989 <211> 316

<212> PRT

<213> Mus musculus

<400> 1989

Met Asp Gly Gly Asn His Ser Val Val Ser Glu Phe Leu Leu Gly 10 Leu Thr Asn Ser Trp Arg Ile Gln Ile Leu Leu Phe Leu Phe Phe Thr 20 25 Val Phe Tyr Val Ala Ser Met Leu Gly Asn Leu Leu Ile Val Leu Thr 35 40 Ile Ile Ser Asp His His Leu His Ser Pro Met Tyr Phe Leu Leu Ala 60 Asn Leu Ser Phe Ile Asp Thr Gly Val Ser Ser Ile Ala Thr Pro Lys 70 75 Met Ile Tyr Asp Leu Phe Arg Lys His Lys Val Ile Ser Leu Asn Gly 85 90 Cys Ile Thr Gln Met Phe Phe Ile His Thr Val Gly Gly Thr Glu Met 105 100 Val Leu Leu Ile Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys Lys 120 Pro Leu His Tyr Leu Thr Ile Met Ser Leu Arg Met Cys Ile Val Leu 135 Leu Ala Leu Ala Trp Ile Ile Gly Leu Ile His Ser Val Ala Gln Leu 150 155 Ala Phe Val Val Asn Leu Pro Phe Cys Gly Ala Asn Lys Met Asp Ser 165 170 175 Phe Tyr Cys Asp Phe Pro Arg Phe Ile Lys Leu Ala Cys Thr Asp Thr 180 185 190 Tyr Arg Leu Glu Phe Leu Val Thr Ala Asn Ser Gly Phe Ile Ser Met 205 195 200 Ala Thr Phe Phe Ile Leu Ile Val Ser Tyr Ile Phe Ile Leu Val Thr 215 220 Val Arg Lys His Ser Ser Gly Ala Ser Ser Lys Ala Leu Ser Thr Leu

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225
                    230
                                        235
Ser Ala His Ile Thr Val Val Val Phe Phe Gly Pro Cys Ile Ile
                245
                                    250
Val Tyr Val Trp Pro Phe Pro Thr Leu Pro Ile Asp Lys Phe Leu Ala
            260
                                265
                                                    270
Ile Phe Asp Ala Ile Ile Thr Pro Ser Met Asn Pro Val Ile Tyr Thr
                            280
Leu Arg Asn Lys Glu Met Lys Val Ala Met Arg Arg Leu Phe Ala Arg
                        295
                                            300
Ala Leu Ser Phe Ile Asp Ser Leu Arg Asp Ser Asn
                    310
<210> 1990
<211> 320
<212> PRT
<213> Mus musculus
<400> 1990
Met Met Ile Leu Met Ser Glu Ala Met Tyr Gly Met Asn Cys Ser Val
1
                                    10
Val Ser Glu Phe Val Phe Leu Gly Ile Thr Asn Ile Trp Glu Val Gln
            20
                                25
Phe Leu Leu Phe Phe Phe Thr Leu Leu Phe Tyr Phe Ala Ser Met Ile
                            40
Gly Asn Leu Val Ile Val Leu Thr Val Thr Leu Asp Pro His Leu Asn
    50
                        55
Ser Pro Leu Tyr Phe Leu Leu Ala Asn Leu Ser Val Ile Asp Met Ile
                    70
                                        75
Phe Cys Ser Ile Thr Ala Pro Lys Met Ile Cys Asp Ile Phe Lys Lys
                85
                                    90
His Lys Thr Ile Ser Phe Trp Gly Cys Ile Thr Gln Ile Phe Phe Ser
            100
                                105
His Ala Val Gly Gly Thr Glu Met Val Leu Leu Ile Ala Met Ala Phe
        115
                            120
Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Leu Ile Ile Met
   130
                        135
                                            140
Ser Pro Arg Val Cys Leu Phe Phe Leu Ile Thr Ser Trp Val Ile Gly
                    150
                                        155
Leu Ile His Ser Val Val Gln Leu Val Phe Val Val Asp Leu Pro Phe
                165
                                    170
Cys Gly Pro Asn Thr Leu Asp Ser Phe Tyr Cys Asp Leu Pro Arg Leu
            180
                                185
                                                    190
Leu Arg Leu Ala Cys Thr Asn Thr Gln Glu Leu Glu Leu Met Val Thr
        195
                            200
                                                205
Val Asn Ser Gly Leu Ile Ser Val Gly Ser Phe Leu Leu Leu Val Ile
                        215
                                            220
Ser Tyr Ile Phe Ile Leu Phe Thr Val Trp Lys His Ser Ser Cys Gly
                    230
                                        235
                                                            240
Leu Ser Lys Ala Leu Ser Thr Leu Ser Ala His Ile Thr Val Val Ile
                245
                                    250
Leu Phe Phe Gly Pro Leu Met Phe Phe Tyr Thr Trp Pro Ser Pro Thr
            260
                                265
                                                    270
Ser His Leu Asp Lys Tyr Leu Ala Ile Phe Asp Ala Phe Ile Thr Pro
                            280
                                                285
Phe Leu Asn Pro Val Ile Tyr Thr Phe Arg Asn Lys Asp Met Lys Val
                        295
                                           300
Ala Met Gly Arg Leu Trp Gly Tyr Leu Arg His Tyr Arg Lys Met Ser
                    310
                                        315
```

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<210> 1991
<211> 310
<212> PRT
<213> Mus musculus
<400> 1991
Met Gly Asn Gly Thr Thr Val Gln Glu Phe Thr Leu Glu Gly Phe Pro
1
Ala Val Gln His Leu Gly Arg Leu Leu Phe Ser Leu Asn Leu Leu Ala
                                25
Tyr Leu Ala Ser Ile Thr Gly Asn Val Val Ile Val Ser Ile Ile Cys
Thr Ser Thr Arg Leu Lys Ser Pro Met Tyr Phe Phe Leu Gly Val Phe
Ser Phe Gly Glu Ser Cys Phe Thr Ser Ala Val Ile Pro Lys Leu Leu
Ala Ile Phe Leu Leu Gly Lys Gln Thr Ile Ser Phe Val Ala Cys Phe
                                     90
Ile Gln Thr Phe Val Thr Leu Phe Ile Gly Ala Phe Gly Phe Phe Leu
            100
                                105
                                                     110
Ile Ala Val Met Ser Val Asp Arg Cys Val Ala Ile Cys Lys Pro Leu
        115
                            120
                                                 125
His Tyr Pro Thr Ile Met Asp Leu Arg Thr Cys Ile Leu Leu Ile Met
                        135
                                            140
Ala Cys Leu Ala Leu Thr Phe Thr Leu Ile Thr Trp Leu Val Val Thr
                    150
                                        155
Val Ser Arg Leu Ser Phe Cys Gly Pro His Val Ile Pro His Phe Phe
                165
                                    170
                                                         175
Cys Asp Ile Ser Pro Leu Ile His Leu Ser Cys Ser Asp Thr Ser Ser
            180
                                185
                                                    190
Ala Glu Ala Leu Thr Phe Ala Leu Ala Leu Ile Ile Leu Phe Ser Ser
        195
                            200
Leu Ile Ile Thr Thr Ile Ala Tyr Ser Asn Ile Val Ile Thr Ile Val
                        215
                                             220
Arg Leu Pro Ser Ala Lys Glu Arg Gln Arg Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Leu Ile Val Leu Ser Leu Met Tyr Gly Ser Cys Val Phe Ile
                245
                                    250
Tyr Val Lys Pro Lys Gln Met Ser Arg Leu Glu Ser Asn Arg Glu Ala
                                                    270
            260
                                265
Ala Leu Val Asn Thr Val Val Thr Pro Leu Leu Asn Pro Val Ile Tyr
                            280
                                                285
Thr Leu Arg Asn Lys Gln Val His Gln Ala Leu Arg Glu Thr Leu Ser
                        295
Arg Ile Lys Ile Ser Gly
<210> 1992
<211> 310
<212> PRT
<213> Mus musculus
<400> 1992
Met Gly Gln Glu Phe Ile Asn Gln Thr Trp Val Asn Glu Phe Ile Leu
Leu Gly Leu Ser Ser Asp Arg Asn Thr Gln Val Phe Leu Phe Val Leu
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Val Leu Ala Met Tyr Val Val Thr Val Val Gly Asn Thr Leu Ile Leu
Phe Leu Ile Arg Leu Asp Ile Arg Leu His Thr Pro Met Tyr Phe Phe
                        55
Leu Ser Val Leu Ser Ile Val Asp Leu Cys Tyr Gly Asn Ser Ile Ala
                    70
                                        75
Pro Gln Met Leu Ala His Leu Val Ser Ala Gln Lys Leu Ile Pro Phe
His Ser Cys Val Phe Gln Leu Tyr Ile Ser Leu Ala Leu Gly Gly Ser
                                105
                                                    110
Glu Phe Phe Leu Leu Gly Ala Met Ser Tyr Asp Arg Tyr Val Ala Val
                            120
Cys His Pro Leu His Tyr Thr Val Ile Met Asp Gly Gly Val Cys Leu
                        135
                                            140
Gly Leu Ala Ala Ser Cys Leu Met Ala Gly Phe Phe Asn Ser Leu Met
                    150
                                        155
Glu Thr Val Ile Thr Phe Arg Leu Pro Leu Cys His Asn Val Ile Asn
                                    170
                165
His Phe Ala Cys Glu Thr Leu Ala Val Leu Arg Leu Ala Cys Val Asp
            180
                                                    190
Ile Ser Phe Asn Lys Val Met Val Ala Ile Ser Gly Phe Leu Val Ile
        195
                            200
Met Leu Pro Cys Cys Leu Val Leu Phe Ser Tyr Thr Arg Ile Val Ile
                        215
Ala Ile Leu Arg Ile Arg Ser Thr Gln Gly Arg His Lys Ala Phe Gly
                    230
Thr Cys Ala Ser His Leu Thr Val Val Cys Met Cys Phe Gly Ala Thr
                                    250
Ile Phe Thr Tyr Leu Gly Pro Arg Ser Ala Ser Ser Glu Asp Lys Glu
                                                     270
                                265
Lys Met Val Ala Leu Phe Tyr Ala Val Val Ala Pro Thr Leu Asn Pro
Val Ile Tyr Ser Leu Arg Asn Lys Glu Val Met Ala Ala Leu Thr Lys
Leu Val Glu Lys Leu Arg
<210> 1993
<211> 313
<212> PRT
<213> Mus musculus
<400> 1993
Met Lys Arg Asp Asn Ala Thr Trp Val Ser Glu Phe Ile Leu Met Gly
Leu Ser Ser Asp Lys His Ile Gln Ala Gly Leu Phe Val Leu Phe Gly
Val Thr Tyr Leu Leu Thr Leu Leu Gly Asn Gly Leu Ile Val Leu Leu
Ile Ala Leu Asp Pro Arg Leu His Leu Pro Met Tyr Phe Phe Leu Cys
His Leu Ser Val Val Asp Ile Cys Tyr Thr Ser Ser Gly Val Pro Gln
                    70
                                        75
Met Leu Ala His Phe Leu Met Glu Lys Lys Thr Ile Ser Phe Ala Leu
                                    90
```

Cys Gly Thr Gln His Phe Phe Ala Leu Ala Leu Gly Gly Thr Glu Phe 105

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Leu Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asn
                            120
Pro Leu Arg Tyr Thr Val Val Met Asn Pro Arg Leu Cys Met Gly Leu
                       135
Ala Gly Val Ser Trp Phe Val Gly Val Val Asn Ser Ala Val Glu Thr
                   150
Ala Val Thr Met Arg Leu Pro Thr Cys Gly His Asn Val Leu Asn His
                                    170
               165
Val Ala Cys Glu Thr Leu Ala Leu Val Arg Leu Ala Cys Val Asp Ile
           180
                               185
                                                    190
Thr Leu Asn Gln Val Val Ile Leu Ala Ser Ser Val Val Val Leu Leu
                           200
       195
Val Pro Cys Cys Leu Val Ser Leu Ser Tyr Ala Tyr Ile Val Thr Ala
                       215
                                            220
Ile Leu Lys Ile Arg Ser Thr Gln Gly Arg Arg Lys Ala Phe Gly Thr
                   230
                                        235
Cys Ala Ser His Leu Thr Val Val Ser Met Ser Tyr Gly Met Ala Leu
               245
                                    250
Phe Thr His Met Glu Pro Thr Ser Thr Ala Ser Ala Glu Gln Asp Lys
                                265
           260
Val Val Val Phe Tyr Ala Val Val Thr Pro Met Leu Asn Pro Leu
                           280
Val Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Phe Ser Arg Val
                       295
Leu Met Lys Ile Phe Glu Ser Lys Asn
                    310
```

<210> 1994

<211> 312

<212> PRT

<213> Mus musculus

<400> 1994

Met Ile Met Asn Asn Lys Thr Val Ile Ser Gln Phe Ile Leu Leu Gly 10 Leu Pro Ile Pro Gln Glu Tyr Gln His Leu Tyr Tyr Ala Leu Phe Leu 20 25 Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu 35 40 4.5 Ile Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 60 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys 70 75 Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Ser Ile Ser Tyr Ala Gly 8.5 90 Cys Leu Thr Gln Met Tyr Phe Leu Leu Val Phe Gly Asp Leu Glu Ser 100 105 110 Ile Leu Leu Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Phe 115 120 125 Pro Leu His Tyr Met Ser Ile Met Ser Pro Thr Leu Cys Val Cys Leu 135 140 Leu Val Leu Ser Trp Val Phe Thr Val Leu Tyr Ser Met Leu His Thr 155 150 Leu Leu Ser Arg Leu Ser Phe Cys Glu Asp Asn Leu Ile His His 165 170 Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile 185 190 His Ile Asn Glu Leu Met Ile Phe Ile Met Gly Gly Leu Val Ser Ile

```
200
        195
Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Ile Gln Ile Val Tyr Ser
                        215
                                            220
Ile Leu Lys Ile Ser Ser Ala His Val Leu His Lys Ile Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Phe
                                    250
Ala Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Ile
                                265
                                                     270
Ser Met Ala Met Met Cys Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Arg Asp Ala Leu Phe Gly Val
                        295
                                            300
Leu Gly Lys Lys Ile Ser Leu
                    310
<210> 1995
<211> 310
<212> PRT
<213> Mus musculus
<400> 1995
Met Arg Asn Phe Ser Val Val Thr Gln Phe Ile Leu Leu Gly Ile Pro
1
                                    10
His Thr Glu Gly Val Glu Ile Met Leu Phe Val Leu Phe Leu Ser Phe
                                25
Tyr Ile Phe Thr Leu Val Gly Asn Leu Leu Ile Leu Phe Ala Ile Val
Ser Ser Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Cys Gln Leu
Ser Val Cys Asp Ile Phe Phe Pro Ser Val Ser Ser Pro Lys Met Leu
Phe Tyr Leu Ser Gly Asn Ser Arg Ala Ile Ser Tyr Thr Gly Cys Val
                8.5
                                    90
                                                         95
Cys Gln Leu Phe Phe Tyr His Phe Leu Gly Cys Thr Glu Cys Phe Leu
            100
Tyr Thr Val Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys Phe Pro Leu
                                                 125
                            120
Arg Tyr Ser Ile Ile Met Asn His Lys Val Cys Ala Ile Met Ala Val
                        135
Gly Thr Ser Phe Phe Gly Cys Ile Gln Ala Thr Phe Leu Thr Thr Leu
                    150
                                        155
Thr Phe Gln Leu Pro Tyr Cys Gly Pro Asn Glu Val Asp Tyr Tyr Phe
                165
                                    170
                                                         175
Cys Asp Ile Pro Val Met Leu Lys Leu Ala Cys Ala Asp Thr Ser Thr
Leu Glu Met Val Gly Leu Ile Ser Val Gly Leu Met Pro Leu Ser Cys
                            200
Phe Leu Leu Ile Leu Thr Ser Tyr Ser Phe Ile Leu Cys Ser Ile Leu
                        215
Gln Ile Arg Ser Thr Glu Gly Arg His Arg Ala Phe Ser Thr Cys Ser
                    230
                                         235
Ala His Leu Thr Ala Ile Leu Leu Ala Phe Met Pro Val Val Leu Ile
                                    250
Tyr Leu Gln Pro Thr Pro Asn Pro Trp Leu Asn Ala Ala Val Gln Val
                                265
                                                     270
Leu Asn Asn Leu Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu
                            280
                                                 285
```

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295
    290
Pro Ile Leu Ser Lys Lys
305
                    310
<210> 1996
<211> 308
<212> PRT
<213> Mus musculus
<400> 1996
Met Gly Thr Gly Asn His Ser Val Thr Val Val Phe Val Leu Val Gly
                                    10
Leu Thr Gln Gln Pro Glu Leu Leu Pro Leu Phe Ile Leu Phe Leu
                                25
Gly Ile Tyr Val Val Thr Ala Val Gly Asn Leu Gly Met Ile Leu Leu
        35
                            40
Ile Thr Val Ser Pro Leu Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
                        55
Ser Leu Ser Cys Val Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro Lys
                    70
Met Leu Val Asn Phe Leu Gly Lys Lys Asn Leu Ile Val Tyr Ser Glu
                                    90
Cys Met Ala Gln Leu Phe Phe Phe Val Ile Phe Val Val Ala Glu Gly
                                105
Tyr Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
Pro Leu Leu Tyr Asn Val Ile Met Ser Ser Arg Leu Cys Ser Leu Leu
                        135
                                            140
Val Leu Val Ala Phe Ile Leu Gly Phe Val Ser Ala Leu Ala His Thr
                    150
Ser Ala Met Met Asn Leu Ser Phe Cys Lys Ser His Val Ile Ser His
                                    170
Tyr Phe Cys Asp Val Leu Pro Leu Leu Asn Leu Ser Cys Ser Asp Ile
            180
                                185
Lys Leu Asn Glu Leu Leu Phe Ile Ile Ala Gly Phe Asn Thr Leu
                            200
Val Pro Thr Leu Ala Val Ala Ile Ser Tyr Val Phe Ile Phe Cys Ser
                        215
Ile Leu His Ile Lys Ser Ser Lys Gly Arg Ser Lys Ala Phe Gly Thr
                    230
                                        235
Cys Ser Ser His Leu Met Ala Val Gly Ile Phe Phe Gly Ser Ile Thr
                                    250
Phe Met Tyr Phe Lys Pro Pro Ser Ser Asn Ser Leu Glu Glu Glu Lys
                                265
Val Ser Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Lys Ala Leu Gly Lys Cys
   290
                        295
                                            300
Leu Ala Gly Arg
305
<210> 1997
<211> 315
<212> PRT
<213> Mus musculus
```

Arg Asn Lys Glu Val Lys Cys Ser Leu Lys Lys Met Leu Gln Gln Gly

```
<400> 1997
Met Gln Val Gln Met Ala Asp Thr Asn His Ser Thr Val Thr Glu Phe
                                    10
Ile Leu Ala Gly Leu Thr Asp Lys Pro Glu Leu Gln Leu Pro Leu Phe
                                25
Leu Leu Phe Leu Gly Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu Gly
Met Ile Ile Leu Ile Leu Leu Ser Ser His Leu His Thr Pro Met Tyr
                        55
Phe Phe Leu Ser Ser Leu Ser Phe Ile Asp Leu Cys Tyr Ser Thr Val
                    70
                                        75
Ile Thr Pro Lys Met Leu Val Asn Phe Val Ala Lys Lys Asn Val Ile
Ser Tyr Glu Glu Cys Met Thr Gln Leu Tyr Phe Phe Leu Ala Phe Val
Ile Ser Glu Cys His Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val
                                                 125
                            120
Ala Ile Cys Asn Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile
Cys Ser Trp Met Val Gly Gly Val Tyr Gly Met Gly Leu Ile Gly Ala
                    150
                                        155
Ala Val His Thr Leu Cys Met Leu Arg Val Val Phe Cys Lys Ala Asn
                                    170
                165
Ile Ile Asn His Tyr Phe Cys Asp Leu Phe Pro Leu Met Glu Leu Ala
            180
                                185
Cys Ser Ser Thr Tyr Val Asn Glu Val Val Leu Leu Cys Leu Ser Ala
       195
                            200
Phe Asn Ile Phe Ile Pro Thr Leu Thr Ile Leu Gly Ser Tyr Ile Phe
                        215
                                            220
Ile Ile Ile Ser Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Phe Lys
                    230
Ala Phe Ser Thr Cys Ser Ser His Phe Ser Ala Val Ser Val Phe Phe
                245
                                    250
Gly Ser Leu Ala Phe Met Tyr Leu Gln Pro Phe Ser Val Ser Ser Lys
            260
                                265
Asp Lys Gly Lys Val Ser Ser Val Phe Tyr Thr Ile Val Pro Met
                            280
Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Leu Ala
                        295
                                            300
Leu Asn Lys Leu Phe Gln Lys Lys Phe His Val
<210> 1998
<211> 311
<212> PRT
<213> Mus musculus
<400> 1998
Met Ala Thr Gly Asn Tyr Cys Met Leu Pro Glu Phe Ile Leu Thr Gly
                                    10
Leu Ser Lys Lys Pro Gln Leu Gln Met Pro Leu Phe Leu Leu Phe Leu
Gly Ile Tyr Val Val Thr Val Val Gly Asn Leu Gly Met Ile Thr Leu
        35
                            40
Ile Lys Leu Ser Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
                                            60
```

Ser Leu Ser Phe Ile Asp Leu Cys His Ser Thr Val Ile Thr Pro Lys

80

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Met Leu Val Asn Phe Val Ile Glu Lys Asn Ile Ile Ser Tyr Thr Gly
Cys Met Ala Gln Leu Tyr Phe Phe Leu Ile Phe Ala Ile Ala Glu Cys
                                105
His Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Tyr Thr Ser Leu
                        135
Ile Phe Gly Val Tyr Ile Ile Gly Val Val Cys Ala Ser Ala His Thr
Gly Phe Met Ile Arg Ile Gln Phe Cys Asn Leu Glu Val Ile Asn His
                                    170
Tyr Phe Cys Asp Leu Leu Pro Leu Leu Glu Leu Ala His Ser Ser Thr
                                185
Tyr Val Asn Glu Leu Leu Val Leu Cys Phe Gly Thr Phe Asn Ile Val
                            200
Val Pro Thr Met Thr Ile Leu Thr Ser Tyr Ile Phe Ile Ile Ala Asn
                        215
Ile Leu Arg Ile Arg Ser Thr Gly Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Leu Ala Val Ala Val Phe Phe Gly Ser Ala Ala
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys
                                265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Ser Val Ala Leu Lys Lys Ile
                        295
Leu Glu Arg Lys Leu Phe Met
```

<210> 1999

<211> 315

<212> PRT

<213> Mus musculus

<400> 1999

Met Glu Glu Ile Asn Asp Thr Ser Val Ala Glu Phe Ile Leu Thr Gly 10 Leu Thr Glu Asn Pro Glu Leu Gln Leu Pro Leu Phe Leu Ile Phe Leu 25 Ala Val Tyr Leu Val Thr Val Val Gly Asn Leu Gly Met Ile Val Leu 40 45 Ile Leu Ile Ser Ser Gln Leu His Thr Pro Met Tyr Tyr Leu Leu Arg 55 Ser Leu Ser Phe Ile Asp Cys Cys Gln Ser Thr Val Ile Ile Pro Lys 70 75 Met Leu Leu Asn Phe Val Thr Glu Met Asn Ile Ile Ser Tyr Pro Gln 90 Cys Ile Ala Gln Phe Tyr Phe Phe Cys Ala Phe Ala Val Ser Glu Cys 100 105 His Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Asn 120 Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Val Cys Ser Leu Met 135 140 Val Ala Val Val Tyr Gly Ile Gly Leu Ile Ser Ala Thr Ala His Thr Val Phe Leu Leu Arg Val Leu Phe Cys Lys Ser Asp Ile Ile Asn His

```
165
                                    170
Tyr Phe Cys Asp Leu Phe Pro Leu Leu Glu Leu Ser Cys Ser Ser Thr
            180
                                185
                                                    190
Tyr Ile Asn Glu Val Leu Ala Leu Ser Phe Ser Ala Phe Asn Ile Ile
                            200
                                                205
Val Pro Ala Leu Thr Ile Leu Ser Ser Tyr Ile Phe Ile Ile Val Ser
                        215
Val Leu His Ile Gln Ser Thr Gly Gly Arg Val Lys Ala Phe Arg Thr
                    230
                                        235
Cys Ser Ser His Ile Met Ala Val Ala Ile Phe Phe Gly Ser Thr Val
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys
                                265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Arg Val Ser Leu Lys Lys Leu
                        295
Leu Gln Lys Ile Ser Phe Leu Lys Thr Lys Asn
                    310
<210> 2000
<211> 314
<212> PRT
<213> Mus musculus
<400> 2000
Met Glu Glu Lys Asn Gln Thr Val Met Pro Glu Phe Leu Phe Leu Gly
                                    10
Ile Thr Asp Asn Phe His Gln Lys Ile Val Ile Phe Ile Ile Phe Phe
                                25
Phe Val Tyr Leu Val Thr Leu Gly Gly Asn Val Gly Met Ile Ala Leu
                            40
                                                45
Ile Trp Leu Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                           60
Gln Leu Ser Phe Val Asp Val Ser Ser Ser Ser Ile Ala Pro Lys
                    70
                                        75
Met Leu Cys Asp Ile Phe Ala Arg Asn Lys Ala Ile Ser Phe Val Gly
                                    90
Cys Ala Ala Gln Met Trp Phe Phe Gly Leu Phe Val Ala Thr Glu Cys
           100
                                105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys
                            120
                                                125
Pro Leu Leu Tyr Thr Leu Ile Met Ser Pro His Leu Ser Val Leu Leu
                        135
                                            140
Val Ile Gly Pro Tyr Ala Ile Ala Leu Ile Ser Thr Thr Thr His Thr
                    150
                                        155
Thr Leu Thr Phe Cys Leu Pro Phe Cys Gly Pro Tyr Ile Ile Asn His
                165
                                    170
Phe Phe Cys Asp Ile Ser Pro Leu Leu Ser Leu Ala Cys Ser Asp Thr
           180
                                185
                                                    190
His Ile Asn Lys Leu Val Leu Phe Val Leu Ala Gly Thr Val Gly Val
                            200
Leu Ser Gly Leu Ile Ile Leu Val Ser Tyr Val Cys Ile Leu Lys Ala
                        215
                                            220
Ile Leu Lys Ile Gln Thr Ala Asn Gly Arg Gln Lys Ala Phe Ser Thr
```

230

Cys Ser Ser His Leu Ala Thr Val Ser Ile Leu Tyr Gly Thr Leu Phe

235

Phe Ile Tyr Val Arg Pro Asn Val Ser Ser Ser Leu Asn Ile Asn Lys Val Ile Ser Leu Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Asn Ala Phe Arg Arg Thr 295 Leu Glu Lys Lys His Phe Leu Thr Gly Ala 310 <210> 2001 <211> 314 <212> PRT <213> Mus musculus <400> 2001 Met Glu Glu Lys Asn Gln Thr Ile Val Met Glu Phe Phe Leu Gly 10 Leu Thr Asp His Leu Tyr Gln Lys Ile Ala Leu Phe Ile Thr Ile Leu 20 25 Phe Val Tyr Leu Val Thr Leu Gly Gly Asn Leu Gly Met Ile Thr Leu 45 40 Ile Trp Ala Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ser Phe Val Asp Met Cys Ser Ser Ser Ser Ile Ala Pro Lys 70 75 Met Leu Cys Asp Ile Phe Ala Glu Glu Lys Arg Ile Ser Phe Met Gly 85 90 Cys Ala Ala Gln Met Trp Phe Phe Gly Phe Phe Val Gly Thr Glu Cys 100 105 110 Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Thr Ala Ile Cys Lys 115 120 Pro Leu Leu Tyr Thr Leu Leu Met Ser Gln Arg Val Cys Val His Leu 135 140 Val Val Gly Pro Tyr Val Phe Ala Ile Ile Asn Ile Thr Thr His Thr 150 155 Thr Leu Ala Phe Cys Leu Pro Phe Cys Gly Ser Asn Thr Ile Asn His 170 165 Phe Phe Cys Asp Val Ser Pro Leu Leu Ser Leu Ala Cys Ala Asp Ser 180 185 190 Trp Val Asn Lys Val Val Leu Phe Val Leu Ser Gly Ala Ile Gly Val 200 Phe Ser Gly Leu Ile Ile Ile Val Ser Tyr Val Ser Ile Leu Met Thr 215 220 Ile Phe Lys Ile Gln Thr Ala Asp Gly Lys Gln Lys Ala Phe Ser Thr 230 235 Cys Ser Ser His Leu Ala Ala Val Ser Ile Leu Tyr Gly Thr Leu Phe 245 250 Phe Ile Tyr Val Arg Pro Ser Ala Ser Phe Ser Leu Asn Ile Asn Lys 260 265 Met Ile Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu

275 280 285

Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Phe Arg Arg Lys

295

Val Gln Lys Lys His Phe Pro Ala Gly Arg

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<213> Mus musculus
<400> 2002
Met Ile Gln Tyr Asn Glu Thr Glu Val Lys Gly Phe Tyr Leu Leu Gly
                5
                                    10
Phe Gly Val Gln His Asp Ile Gln Cys Phe Leu Phe Ile Val Phe Leu
                                25
Ile Ile Tyr Met Thr Ser Met Val Gly Asn Thr Gly Met Ile Leu Leu
                            40
                                                 45
Ile His Thr Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Gln
                        55
                                            60
His Leu Ala Phe Val Asp Ile Cys Tyr Thr Ser Ala Ile Thr Pro Lys
                    70
                                        75
Met Leu Gln Thr Phe Val Val Glu Asp Arg Tyr Ile Ser Phe Gly Gly
                85
                                    90
Cys Val Val Gln Leu Leu Ile Tyr Ala Ile Phe Ala Thr Cys Asp Cys
            100
                                105
                                                     110
Tyr Leu Leu Ala Ala Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys
        115
                            120
                                                 125
Pro Leu Arg Tyr Pro Ile Leu Met Ser Arg Lys Val Cys Ile Gln Met
                        135
                                            140
Val Ala Gly Ser Tyr Leu Ile Gly Ser Ile Asn Ser Ser Val His Thr
                    150
                                        155
Gly Phe Thr Phe Ser Leu Ser Tyr Cys Lys Ser Asn His Ile Asn His
                165
                                    170
                                                         175
Phe Phe Cys Asp Val Pro Pro Ile Ile Ser Leu Ser Cys Ser Asn Ile
            180
                                185
                                                    190
Glu Thr Asn Ile Lys Ile Leu Val Ile Phe Val Gly Phe Asn Leu Ile
        195
                            200
                                                 205
Phe Thr Val Leu Val Val Ile Phe Ser Tyr Met Tyr Ile Met Ala Ala
                        215
                                            220
Ile Leu Lys Met Ser Ser Thr Ala Gly Arg Lys Lys Thr Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu Ala
                245
                                    250
Tyr Met Tyr Leu Gln Pro His Ser Asp Asn Ser Glu Glu Asn Met Lys
            260
                                265
Val Ala Ser Val Phe Tyr Gly Ile Val Ile Pro Met Leu Asn Pro Leu
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Ile Lys Leu Thr
                        295
Lys Lys Leu Phe Arg Phe Asp Thr Gln
                    310
<210> 2003
<211> 315
<212> PRT
<213> Mus musculus
<400> 2003
Met Ile Gln Arg Asn Thr Thr Glu Val Thr Asp Phe Tyr Leu Leu Gly
Phe Gly Val Gln Lys Asn Thr Gln Ser Ile Leu Phe Val Val Phe Leu
            20
Val Val Tyr Val Thr Ser Met Val Gly Asn Thr Gly Met Ile Leu Leu
        35
                            40
```

<211> 314 <212> PRT

```
Ile Asn Thr Asn Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Gln
                                            60
Asn Leu Ala Phe Val Asp Ile Cys Tyr Thr Ser Ala Ile Thr Pro Lys
                    70
                                        75
Met Leu Gln Asn Phe Met Val Glu Asp Ser Ser Ile Ser Tyr Thr Gly
                85
                                    90
Cys Val Ile Gln Leu Leu Val Tyr Ala Thr Phe Ala Thr Ser Asp Cys
            100
                                105
Tyr Leu Leu Ala Val Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu Arg Tyr Pro Ile Ile Met Ser Arg Gln Val Cys Val Gln Leu
                        135
                                            140
Val Ala Phe Ser Tyr Leu Met Gly Ser Ile Asn Ser Ser Val His Thr
                    150
                                        155
Gly Phe Thr Phe Ser Leu Ser Tyr Cys Asn Ser Lys Asn Ile Asn His
                165
                                    170
Phe Phe Cys Asp Val Val Pro Ile Ile Ser Leu Ser Cys Ser Asn Ile
            180
                                185
Asp Ile Asn Ile Met Leu Leu Val Ile Phe Val Gly Phe Asn Leu Thr
       195
                            200
                                                205
Phe Thr Val Leu Val Ile Ile Phe Ser Tyr Ile Tyr Ile Met Ala Ala
    210
                       215
                                            220
Ile Leu Lys Met Ser Ser Thr Ala Gly Arg Lys Lys Thr Phe Ser Thr
                                        235
                    230
Cys Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu Ala
                245
                                    250
Tyr Met Tyr Leu Gln Pro His Ser Asp Asn Ser Glu Glu Asn Met Lys
            260
                                265
                                                    270
Val Ala Ser Val Phe Tyr Gly Ile Val Ile Pro Met Leu Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Gly Phe Lys Ala Met
    290
                       295
                                            300
Ser Arg Arg Phe Leu Arg Leu Lys Ser Asn Pro
                    310
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<210> 2004
```

<400> 2004

Met Thr Gln Gly Asn Gly Thr Glu Val Thr Asp Phe Tyr Leu Leu Gly 10 Phe Gly Val Glu Arg Asp Ile Gln Cys Val Leu Phe Ile Val Phe Leu 20 Val Ile Tyr Val Thr Ser Met Val Gly Asn Thr Gly Met Ile Leu Leu 35 40 Ile Asn Thr Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Gln 55 60 His Leu Ala Phe Val Asp Ile Cys Tyr Thr Ser Ala Ile Thr Pro Lys 75 7.0 Met Leu Gln Asn Phe Met Val Glu Asp Lys Ser Ile Thr Phe Lys Gly 85 90 Cys Val Ile Gln Leu Phe Ile Tyr Ala Val Phe Ala Thr Ser Asp Cys 105 Tyr Leu Leu Ala Val Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu Arg Tyr Pro Ile Ile Met Ser Arg Gln Val Cys Val Gln Leu

<211> 314

<212> PRT

<213> Mus musculus

```
135
                                            140
Val Ala Val Ser Tyr Leu Met Gly Ser Ile Asn Ser Ser Val His Thr
                    150
                                        155
Gly Phe Thr Phe Ser Leu Ser Phe Cys Ala Ser Lys Ile Asn His Phe
                                    170
                165
Phe Cys Asp Ile Pro Pro Ile Val Thr Leu Ser Cys Tyr Asn Asn Asp
           180
                                185
Ile Asn Phe Met Leu Ile Leu Ile Phe Val Gly Phe Asn Leu Thr Phe
                            200
       195
Thr Val Ser Val Val Ile Leu Ser Tyr Ile Tyr Ile Met Ala Ala Ile
                        215
Leu Lys Met Ser Ser Thr Ala Gly Arg Lys Lys Thr Phe Ser Thr Cys
                    230
                                        235
225
Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu Ala Tyr
                245
                                    250
Met Tyr Leu Gln Pro Pro Ser Asp Asn Ser Glu Glu Asn Met Lys Val
                                265
            260
Ala Ser Val Phe Tyr Gly Ile Val Ile Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Ile Lys Ala Thr Gly
                        295
Lys Lys Phe Leu Lys Leu Asp Leu Asn Tyr
                    310
```

<210> 2005

<211> 313

<212> PRT

<213> Mus musculus

<400> 2005

Met Glu Arg Ile Asn Tyr Thr Val Leu Thr Glu Phe Ile Leu Thr Gly Val Pro His Pro Pro Arg Leu Arg Thr Phe Leu Phe Val Phe Phe Leu Leu Ile Tyr Ile Leu Thr Gln Leu Gly Asn Ala Leu Ile Leu Ile Thr 1 45 Val Cys Ala Asp Thr Gln Leu His Ala Arg Pro Met Tyr Ile Phe Leu Gly Ala Leu Ser Val Ile Asp Met Gly Ile Ser Thr Ile Ile Val Pro Arg Leu Met Met Asn Phe Thr Pro Gly Ile Lys Pro Ile Pro Phe Gly 8.5 Gly Cys Val Ala Gln Leu Tyr Phe Tyr His Phe Leu Gly Ser Ser Gln Cys Phe Leu Tyr Thr Thr Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Gln Pro Leu Arg Tyr Pro Val Leu Met Ser Ala Lys Leu Ser Ile Leu Leu Val Ala Gly Ala Trp Val Ala Gly Ser Ile His Gly Ala Ile Gln Ala Ile Leu Thr Phe Arg Leu Pro Tyr Cys Gly Pro Asn Gln Val Asp Tyr Phe Phe Cys Asp Ile Pro Ala Val Leu Lys Leu Ala Cys Ala Asp Thr Thr Val Asn Glu Leu Val Thr Phe Val Asp Ile Gly Val Val Val Ala Ser Cys Phe Ser Leu Ile Leu Leu Ser Tyr Ile Tyr Ile Ile Arg

<210> 2006 <211> 318 <212> PRT

<213> Mus musculus

<400> 2006

Met Arg Arg Thr Arg Asn Thr Ser Leu Asp Ala Val Val Thr Asp Phe 10 Leu Leu Gly Leu Ala His Pro Pro Asn Leu Arg Ala Phe Leu Phe 25 Leu Val Phe Phe Leu Ile Tyr Ile Leu Thr Gln Leu Gly Asn Leu Leu Ile Leu Leu Thr Val Trp Ala Asp Pro Lys Leu His Ala Arg Pro Met Tyr Ile Leu Leu Gly Val Leu Ser Phe Leu Asp Met Trp Leu Ser Ser 75 Val Ile Val Pro Arg Leu Ile Leu Asn Phe Thr Pro Ala Ser Lys Ala 90 Ile Pro Phe Gly Gly Cys Val Ala Gln Leu Tyr Phe Phe His Phe Leu 100 105 110 Gly Ser Thr Gln Cys Phe Leu Tyr Thr Leu Met Ala Tyr Asp Arg Tyr 120 125 Leu Ala Ile Cys Gln Pro Leu Arg Tyr Pro Val Leu Met Asn Gly Lys 135 140 Leu Cys Thr Ile Leu Val Ser Gly Ala Trp Val Ala Gly Ser Ile His 150 155 Gly Ser Ile Gln Thr Thr Leu Thr Phe Arg Leu Pro Tyr Cys Gly Pro 165 170 175 Asn Gln Ile Asp Tyr Phe Ile Cys Asp Ile Pro Ala Val Leu Arg Leu 180 185 190 Ala Cys Ala Asp Thr Thr Val Asn Glu Leu Val Thr Phe Val Asp Ile 200 205 Gly Val Val Ala Ala Ser Cys Phe Met Leu Ile Leu Leu Ser Tyr Ala 215 220 Asn Ile Val His Ala Ile Leu Lys Ile Arg Thr Ala Asp Gly Arg Lys 235 Arg Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Thr Val Tyr 250 Tyr Val Pro Cys Ile Phe Ile Tyr Leu Arg Ala Gly Ser Lys Ser Pro Phe Asp Gly Ala Val Ala Val Phe Tyr Thr Val Val Thr Pro Leu Leu 280 Asn Pro Leu Ile Tyr Thr Leu Arg Asn Gln Glu Val Lys Ser Ala Leu Lys Arg Leu Thr Ala Gly Arg Arg Asp Val Gly Glu Lys

305 310 315

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<210> 2007
<211> 311
<212> PRT
<213> Mus musculus
<400> 2007
Met Lys Thr Leu Ser Ser Pro Ser Asn Ser Ser Thr Ile Thr Gly Phe
                                    10
Ile Leu Leu Gly Phe Pro Cys Pro Arg Glu Gly Gln Ile Leu Leu Phe
            20
                                25
Val Thr Phe Phe Ile Val Tyr Ile Leu Ile Leu Met Gly Asn Ala Ser
Ile Ile Cys Ala Val Tyr Cys Asp Gln Arg Leu His Thr Pro Met Tyr
                        55
Phe Leu Leu Ala Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Thr Ser
                    70
Thr Val Pro Asn Met Leu Ala Asn Phe Leu Ser Asp Thr Lys Val Ile
                                    90
Ser Phe Ser Gly Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser Phe Gly
                                105
Ser Thr Glu Cys Phe Phe Leu Ala Val Met Ala Phe Asp Arg Tyr Leu
                            120
                                                125
Ala Ile Cys Arg Pro Leu His Tyr Pro Ser Leu Met Thr Gly His Leu
                        135
                                            140
Cys Asn Ile Leu Val Ile Ser Cys Trp Val Leu Gly Phe Leu Trp Phe
                    150
                                        155
Pro Val Pro Ile Ile Ile Ser Gln Met Ser Phe Cys Gly Ser Arg
                                    170
Ile Ile Asp His Phe Leu Cys Asp Pro Gly Pro Leu Leu Ala Leu Ala
            180
                                185
Cys Ser Arg Ala Pro Leu Met Glu Val Phe Trp Thr Ile Ile Met Ser
                            200
Met Leu Leu Val Ile Pro Phe Leu Phe Ile Met Gly Thr Tyr Ile Leu
                        215
                                            220
Val Leu Arg Ala Val Phe Arg Leu Pro Ser Arg Asp Gly Gln Lys Lys
                    230
                                        235
Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr
                245
                                    250
Cys Ser Val Met Lys Met Tyr Leu Ser Pro Thr Ser Glu His Glu Ala
                                265
Gly Met Gln Lys Leu Val Thr Leu Phe Tyr Ser Val Gly Thr Pro Leu
                            280
Leu Asn Pro Val Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Asn Ala
                        295
                                            300
Leu Gln Lys Ile Leu Arg Thr
<210> 2008
<211> 319
<212> PRT
<213> Mus musculus
<400> 2008
Met Gln Val Thr Thr Glu Arg Gln Asn Val Ser Phe Pro Asp Thr Phe
                                    10
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Val Leu Val Gly Phe Ser Asp His Pro Trp Leu Glu Met Pro Leu Phe
Gly Val Leu Leu Ile Ser Tyr Ile Phe Thr Met Ile Gly Asn Ser Ser
Ile Ile Val Leu Ser Leu Val Glu Pro Arg Leu Gln Thr Pro Met Tyr
Phe Phe Leu Asp Asn Leu Ser Leu Leu Asp Leu Cys Val Thr Cys Thr
Ile Val Pro Gln Leu Leu Val Asn Leu Trp Gly Pro Glu Lys Thr Ile
Ala Ser Trp Ser Cys Ile Ala Gln Ala Tyr Leu Phe His Trp Thr Ser
Cys Thr Glu Ser Ala Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Val
                            120
Ala Ile Cys Cys Pro Leu Arg Tyr Val Leu Ile Met His Leu Trp Ala
                        135
Cys Val Trp Leu Ala Ala Val Cys Trp Ala Ser Gly Leu Ala Asn Ser
                    150
                                        155
Leu Val Gln Ala Thr Leu Thr Leu Tyr Leu Thr Leu Cys Ala Lys Asn
                                    170
Thr Leu Asp His Phe Phe Cys Glu Val Pro Ala Leu Ile Lys Leu Ala
            180
                                185
Cys Ser Asp Thr Thr Thr Asn Asp Leu Ser Leu Ala Leu Gly Ala Ile
                            200
Pro Phe Gly Ile Val Ser Pro Leu Thr Val Leu Ile Ser Tyr Ile Phe
                        215
Ile Ala Arg Ala Val Leu Lys Leu Pro Ser Ala Glu Gly Arg Arg Lys
                    230
Ala Leu Ser Thr Cys Thr Ser His Leu Leu Val Val Thr Met Tyr Phe
                                    250
Gly Pro Gly Met Tyr Thr Tyr Leu Gln Pro Pro Gly Asn Asn Thr Gln
                                265
Ser Glu Phe Leu Ser Leu Phe Tyr Cys Val Phe Thr Pro Leu Leu Asn
Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Glu Ala Trp Lys
                        295
Lys Val Leu Thr Ser Gln Ser Lys Gly Ile Ser Leu Lys Gly Gln
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<210> 2009
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<400> 2009

 Met Glu Arg Thr Asn Val Ser His Glu Met Glu Phe Glu Leu Leu Gly 1
 5
 10
 15
 15

 Leu Thr Ser Asp Pro Gln Leu Gln Lys Leu 20
 25
 30
 30
 Val Phe Leu 30
 25
 30

 Val Met Tyr Ala Ile Thr Val Leu Gly Asn Leu Val Met Phe Phe Leu 35
 40
 45
 45
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<211> 311

<212> PRT

<213> Mus musculus

```
100
                                105
Tyr Leu Ile Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Ser
                           120
                                                125
       115
Pro Leu Leu Tyr Pro Thr Ile Val Ser Pro Asn Val Cys Ala Ser Leu
                                            140
                        135
Ile Gly Gly Ser Tyr Gly Ala Gly Phe Leu Asn Ser Leu Ile His Thr
                   150
                                        155
Ser Cys Ile Phe Ser Leu Asn Phe Cys Gly Ala His Val Val Thr His
                                   170
               165
Phe Phe Cys Asp Gly Pro Pro Ile Leu Ser Leu Ser Cys Val Asp Thr
           180
                                185
                                                    190
Ser Leu Cys Glu Ile Leu Leu Phe Ile Phe Ala Gly Phe Asn Leu Leu
                            200
       195
Ser Cys Thr Leu Thr Ile Leu Ile Ser Tyr Leu Leu Ile Phe Ile Ala
                                            220
   210
                        215
Ile Leu Gln Ile Arg Ser Asn Gln Gly Arg Phe Lys Ala Phe Ser Thr
                                        235
                    230
Cys Ser Ser His Leu Thr Ala Val Cys Phe Phe Gly Thr Thr Leu
               245
                                    250
Phe Met Tyr Leu Arg Pro Lys Ser Ser Tyr Ser Leu Thr Gln Asp Arg
            260
                                265
Thr Val Ala Val Ile Tyr Thr Ala Val Ile Pro Met Leu Asn Pro Leu
                            280
                                                285
        275
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Arg Lys Val
                        295
Trp Gly Trp Lys Ser Met Gly
```

<210> 2010

<211> 315

<212> PRT

<213> Mus musculus

<400> 2010

Met Thr Asp Thr Ile Thr Asn Thr Thr Glu Tyr Met Glu Phe Leu Leu Met Gly Tyr Pro Asp Glu Gln Val Leu Gln Thr Leu Cys Ala Thr Leu Phe Phe Leu Ile Tyr Leu Gly Ala Leu Val Gly Asn Phe Leu Ile Ile Thr Ile Thr Thr Ile Asp Gln His Leu Gln Ser Pro Met Tyr Phe Phe Leu Lys Asn Leu Ser Leu Ile Asp Ile Cys Tyr Ile Ser Val Thr Val Pro Lys Ser Ile Met Asn Ser Val Thr Asn Thr His Ser Ile Ser Phe 8.5 Leu Gly Cys Val Leu Gln Val Phe Cys Val Ile Phe Leu Ala Gly Thr Glu Phe Ala Leu Leu Val Met Ser Tyr Asp Arg Tyr Ala Ala Ile Cys Phe Pro Leu His Tyr Glu Ala Val Met Asn Lys Asp Ala Cys Val Gln Met Val Ala Ala Ala Trp Leu Ser Gly Cys Ile Tyr Gly Ser Val His Ala Thr Gly Thr Phe Ser Val His Phe Cys Gly Pro Asn Val Val Tyr Gln Phe Phe Cys Asp Ile Pro Ser Leu Leu Arg Leu Ala Cys Phe

```
Gly Asp Gln Ile Leu Glu Tyr Val Phe Ile Ile Thr Ser Cys Cys Phe
                            200
Ala Phe Met Cys Phe Ile Leu Met Val Ile Ser Tyr Val His Ile Phe
                        215
                                            220
Thr Ile Ile Leu Arg Ile Pro Ser Ile Gln Gly Arg Phe Lys Ile Phe
                    230
                                        235
Ser Thr Cys Ile Pro His Leu Thr Val Val Thr Leu Phe Leu Ser Ser
                                    250
Gly Phe Val Ala Tyr Leu Gly Ser Ala Val Lys Ser Pro Ser Ser Leu
                                                    270
                                265
Asn Leu Phe Met Ser Val Phe Tyr Ser Leu Leu Pro Pro Ser Leu Asn
                            280
Pro Val Ile Tyr Ser Phe Arg Asn Ser Asp Val Lys Val Ala Leu His
                                         f. 300
                        295
Asn Ile Phe Gly Glu Lys Met Thr Thr His Phe
                    310
```

<210> 2011 <211> 314 <212> PRT

<213> Mus musculus

<400> 2011

Met Ala Phe Leu Glu Asp Ala Asn His Thr Ala Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Lys Val Val Leu Phe Ser Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Ser Val Asp Val Gly Tyr Ser Ser Thr Val 75 Thr Pro Lys Met Leu Ala Asn Phe Leu Val Glu Arg Ser Thr Ile Ser Tyr Leu Gly Cys Thr Ile Gln Leu Phe Ser Gly Ala Phe Phe Gly Thr 100 105 Leu Glu Cys Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Ile Ala 120 Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys 135 Ile Gln Leu Leu Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser 155 150 Ser Phe Leu Leu Ser Phe Phe Pro Leu Leu Phe Cys Gly Pro Asn Arg 170 Val Asn His Phe Phe Cys Asp Leu Ala Pro Leu Ile Glu Leu Ser Cys 185 Ser Gly Ser Asn Val Pro Ile Val Pro Ala Ser Phe Cys Ser Ala Phe 200 Val Ile Ile Val Thr Val Phe Val Ile Ala Ile Ser Tyr Thr Tyr Ile 215 Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala 230 235 Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly 245 250 255 Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Phe Ser Thr Asp 265 Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu

```
280
       275
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu
                        295
Lys Arq Gln Leu Ala Arg Lys Ile Phe Ser
                    310
<210> 2012
<211> 314
<212> PRT
<213> Mus musculus
<400> 2012
Met Ala Phe Leu Glu Asp Gly Asn His Thr Ala Val Thr Glu Phe Val
                                    10
                 5
Leu Phe Gly Leu Thr Asp Asp Pro Val Leu Arg Val Ile Leu Phe Ile
                                25
            20
Ile Phe Leu Cys Ile Tyr Leu Val Asn Val Ser Gly Asn Leu Ser Thr
                            40
Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe
                        55
Phe Leu Ser His Leu Ala Ser Val Asp Val Gly Tyr Ser Ser Thr Val
                    70
                                        75
Thr Pro Lys Met Leu Ala Asn Phe Leu Leu Glu Arg Ser Thr Ile Ser
                85
                                    90
Tyr Leu Gly Cys Thr Ile Gln Leu Phe Ser Gly Ala Phe Val Gly Thr
           100
                                105
Leu Glu Cys Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Ile Ala
                            120
                                                125
       115
Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys
                        135
                                            140
Ile Gln Leu Leu Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser
                   150
                                        155
Ser Phe Leu Leu Ser Phe Phe Pro Leu Leu Phe Cys Gly Pro Asn Arg
                165
                                    170
Val Asn His Tyr Ser Cys Asp Leu Thr Pro Leu Ile Glu Leu Ser Cys
           180
                                185
                                                    190
Ser Gly Ser Asn Val Pro Ile Val Pro Ala Ser Phe Cys Ser Ala Phe
                            200
                                                205
Val Ile Ile Val Thr Val Ser Val Ile Ala Ile Ser Tyr Thr Tyr Ile
                        215
Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly
                245
                                    250
Thr Val Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Asp
                                265
Gln Asn Lys Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu
        275
                            280
Asn Pro Ile Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu
                        295
Lys Arg Gln Leu Ala Arg Lys Ile Phe Ser
                    310
<210> 2013
<211> 314
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<212> PRT

<213> Mus musculus

```
Met Met Leu Gly Arg Met Ala Phe Ser Asn Asp Ser Ser Val Lys Glu
Phe Ile Leu Cly Leu Thr Gln Gln Pro Glu Leu Gln Met Pro Leu
Phe Phe Leu Phe Leu Gly Ile Tyr Val Val Ser Met Val Gly Asn Leu
Gly Leu Ile Val Leu Ile Val Leu Asn Pro His Leu His Thr Pro Met
                        55
Tyr Tyr Phe Leu Phe Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser
                   70
                                        75
Val Ile Thr Pro Arg Met Leu Val Gly Phe Val Lys Gln Asn Ile Ile
               85
                                    90
Ser His Ala Glu Cys Met Thr Gln Leu Phe Phe Cys Phe Phe Val
                                105
           100
Ile Asp Glu Cys Tyr Ile Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala
                            120
                                                125
       115
Ala Ile Cys Lys Pro Leu Leu Tyr Gln Val Thr Met Ser His Gln Val
                       135
                                            140
Cys His Leu Met Met Val Gly Val Tyr Val Met Gly Leu Val Gly Ala
                    150
                                        155
Met Ala His Thr Gly Ser Met Leu Ser Leu Thr Phe Cys Asp Gly Asn
                                    170
                                                       175
               165
Ile Ile Asn His Tyr Met Cys Asp Ile Pro Pro Leu Gln Lys Leu Ser
                                185
           180
                                                   190
Cys Thr Ser Thr Ser Ile Asn Glu Leu Val Val Phe Ile Val Val Gly
       195
                           200
Val Asn Val Ile Ile Pro Ser Leu Thr Val Phe Ile Ser Tyr Thr Leu
                       215
                                            220
Ile Leu Ser Asn Ile Leu Ser Ile Gln Ser Ala Glu Gly Arg Ser Lys
                    230
                                        235
Ala Phe Ser Thr Cys Gly Ser His Val Ile Ala Val Ser Leu Phe Phe
               245
                                    250
Gly Ala Ser Ala Phe Met Tyr Leu Lys Pro Ser Ser Ala Ser Val Asp
           2.60
                                265
                                                    270
Asp Asp Lys Ile Ser Thr Ile Phe Tyr Thr Ile Val Gly Pro Met Leu
                           280
                                               285
        275
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val His Ile Ala Leu
                       295
Arg Lys Thr Leu Lys Lys Ser Met Phe Ile
                    310
<210> 2014
<211> 309
<212> PRT
<213> Mus musculus
<400> 2014
Met Gly Phe Gly Asn Asp Ser Ser Val Lys Glu Phe Ile Leu Leu Gly
                                    10
Leu Thr Gln Gln Pro Glu Leu Gln Leu Pro Leu Phe Phe Leu Phe Leu
           2.0
                                25
Gly Ile Tyr Val Val Ser Ile Val Gly Asn Leu Gly Leu Ile Val Leu
                           40
                                                45
Ile Val Leu Asn Pro His Leu His Thr Pro Met Tyr Tyr Phe Leu Phe
                       5.5
Asn Leu Ser Phe Val Asp Phe Cys Tyr Ser Ser Val Ile Thr Pro Lys
```

<400> 2013

```
70
65
                                        75
Met Leu Val Ser Phe Val Thr Gln Asn Ile Ile Ser His Ala Glu Cys
                85
                                    90
Met Thr Gln Leu Phe Phe Phe Ala Phe Phe Val Ile Asp Glu Cys Tyr
                                105
            100
Ile Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys Pro
                            120
                                                125
       115
Leu Leu Tyr Gln Val Thr Met Ser His Gln Val Cys His Phe Met Met
                        135
                                            140
Met Gly Val Val Wal Met Gly Ser Val Gly Ala Val Ala His Ile Ile
                   150
                                        155
Cys Met Leu Arg Leu Thr Phe Cys Asp Gly Asn Ile Ile Asn His Tyr
                                   170
               165
Met Cys Asp Ile Pro Pro Leu Leu Lys Leu Ser Cys Thr Ser Thr Tyr
                                185
           180
                                                    190
Ile Asn Glu Leu Val Val Phe Ile Ile Val Gly Phe Asn Val Thr Val
                            200
       195
                                                205
Pro Ile Leu Thr Ile Phe Ile Ser Tyr Thr Leu Ile Leu Ser Asn Ile
                        215
                                            220
Leu Ser Ile His Ser Ala Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                    230
                                        235
Gly Ser His Val Ile Ala Val Ser Ile Phe Phe Gly Ser Leu Ala Phe
                                    250
               245
Met Tyr Leu Lys Pro Ser Ser Ala Ser Val Asp Asp Asp Lys Ile Ser
            260
                                265
                                                   270
Thr Ile Phe Tyr Thr Ile Val Gly Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Val His Ile Ala Met Arg Lys Thr Leu Lys
                        295
Lys Gly Met Phe Ala
305
```

<210> 2015

<211> 309

<212> PRT

<213> Mus musculus

<400> 2015

Met Val Leu Glu Asn Ser Ser Ser Val Lys Glu Phe Ile Leu Leu Gly Leu Thr Gln Gln Pro Glu Leu Gln Met Pro Leu Phe Phe Leu Phe Leu Gly Ile Tyr Ile Val Ser Met Val Gly Asn Leu Gly Leu Thr Val Leu Ile Val Leu Asn Pro His Leu His Asn Pro Met Tyr Tyr Phe Leu Phe Asn Leu Ser Phe Thr Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro Arg 7.5 Met Leu Val Gly Phe Val Lys Gln Asn Thr Ile Ser His Ala Glu Cys 8.5 Met Thr Gln His Phe Phe Cys Phe Phe Val Ile Asp Glu Cys Tyr Ile Leu Thr Ala Val Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys Pro Leu Leu Tyr Gln Val Thr Met Ser His Gln Val Cys Leu Leu Met Thr Val Gly Val Tyr Val Met Gly Phe Leu Glu Ala Ile Ala His Thr Gly

```
Ser Met Val Ser Leu Thr Phe Cys Asp Gly Asn Ile Ile Asn His Tyr
                                    170
Ala Cys Asp Ile Leu Pro Leu Leu Lys Leu Ser Cys Thr Ser Thr Thr
            180
                                185
                                                    190
Ile Asn Glu Leu Val Val Phe Ile Val Val Gly Val Asn Val Ile Val
                            200
Pro Thr Leu Thr Ile Phe Ile Ser Tyr Thr Leu Ile Leu Ser Asn Ile
                        215
Leu Ser Ile His Ser Ala Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                    230
                                        235
Gly Ser His Val Ile Ala Val Ser Leu Phe Phe Gly Ala Ala Ala Phe
                                    250
Met Tyr Leu Lys Pro Ser Ser Ala Ser Glu Asp Asp Lys Val Ser
                                265
                                                    270
Thr Ile Phe Tyr Thr Ile Val Gly Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Val Tyr Leu Ala Leu Arg Lys Thr Leu Met
                        295
                                            300
Lys Arg Ser Phe Thr
```

<210> 2016 <211> 314 <212> PRT

<213> Mus musculus

<400> 2016

Met Asn Trp Gly Arg Met Ala Leu Gly Asn Asp Ser Ser Val Lys Glu Phe Ile Leu Leu Gly Leu Thr Gln Gln Pro Glu Leu Gln Leu Pro Leu 25 Phe Phe Phe Leu Gly Val Tyr Ile Phe Ser Val Val Gly Asn Leu 40 Gly Leu Ile Val Leu Ile Val Leu Asn Pro His Leu Gln Thr Pro Met 55 Tyr Tyr Phe Leu Phe Asn Leu Ser Phe Thr Asp Leu Cys Tyr Ser Ser 70 75 Val Ile Thr Pro Lys Met Leu Val Ser Phe Val Lys Gln Asn Ile Ile 90 Ser His Ala Glu Cys Met Thr Gln Leu Phe Phe Cys Phe Phe Val 105 Ile Asp Glu Cys Tyr Ile Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala 120 Ala Ile Cys Lys Pro Leu Leu Tyr Gln Val Thr Met Ser His Arg Val 135 140 Cys Leu Leu Met Thr Val Gly Val Tyr Val Met Gly Phe Val Glu Ala 150 155 Met Ala His Thr Ala Ser Met Val His Leu Ile Phe Cys Asp Ser Asn 165 170 175 Ile Ile Asn His Tyr Met Cys Glu Ile Asn Ala Leu Leu Lys Leu Ser 180 185 190 Cys Thr Ser Thr Ser Ile Asn Glu Leu Val Val Tyr Ile Val Val Gly 195 200 Phe Asn Val Ile Val Pro Thr Leu Thr Ile Phe Ile Thr Tyr Thr Leu 215 Ile Leu Phe Asn Ile Leu Ser Ile His Ser Ala Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys Gly Ser His Met Ile Ala Val Ser Leu Phe Phe

```
245
                                    250
Gly Ala Ala Ala Phe Met Tyr Leu Lys Pro Ser Ser Ala Ser Glu Asp
                                265
Glu Asp Lys Val Ser Thr Ile Phe Tyr Thr Ile Met Gly Pro Met Leu
                            280
        275
Asn Pro Phe Ile Tyr Ser Ile Arg Asn Lys Asp Val His Ile Ala Leu
                        295
Lys Lys Thr Leu Lys Arg Ser Ile Phe Ile
                    310
<210> 2017
<211> 311
<212> PRT
<213> Mus musculus
<400> 2017
Met Ala Ala Ala Asn Thr Ser Ser Val Ala Glu Phe Ile Leu Val Gly
                 5
                                    10
Leu Thr Asp Gln Pro Gln Leu Gln Ile Pro Leu Phe Phe Leu Phe Leu
                                25
Gly Phe Tyr Ile Val Thr Met Val Gly Asn Leu Gly Leu Ile Thr Leu
                            40
Ile Gly Leu Asn Ser His Leu His Ile Pro Met Tyr Phe Phe Leu Phe
                        55
                                            60
Asn Leu Ser Phe Ile Asp Phe Ser Tyr Ser Thr Thr Leu Thr Pro Lys
                    70
                                        75
Met Leu Val Gly Phe Val Leu Arg Lys Asn Ile Ile Ser Tyr Ala Gly
                85
                                    90
Cys Met Thr Gln Phe Phe Phe Cys Phe Phe Val Phe Ser Glu Ser
                                105
            100
                                                    110
Tyr Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
                                                125
Pro Leu Leu Tyr Ser Val Thr Met Ser Pro Gln Val Cys Ser Tyr Leu
                        135
                                            140
Leu Ser Gly Val Tyr Gly Met Gly Val Phe Gly Ala Val Ala His Met
                    150
                                        155
Gly Asn Leu Gln Phe Ile Ser Phe Cys Ala Asp Asn Ile Ile Asn His
                                    170
               165
Tyr Met Cys Asp Ile Ile Pro Leu Leu Glu Leu Ser Cys Asn Ser Ser
           180
                                185
                                                    190
Tyr Ile Asn Leu Leu Val Val Phe Ile Val Val Thr Ile Gly Ile Gly
                            200
Val Pro Ile Val Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser
                        215
                                            220
Ile Leu His Ile Ser Ser Lys Glu Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Ile Ile Val Val Ser Leu Phe Phe Gly Ser Gly Ala
                245
                                    250
Phe Met Tyr Leu Lys Pro Pro Ser Ser Leu Pro Leu Asp Gln Gly Lys
                                265
Val Ser Ser Val Phe Tyr Thr Ala Val Val Pro Met Phe Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Leu Lys Lys Thr
                        295
Leu Ser Arg Lys Asn Phe Ser
```

```
<211> 315
<212> PRT
<213> Mus musculus
<400> 2018
Met Asp Val Tyr Asn Leu Thr Thr Val Thr Gln Phe Ile Leu Ile Gly
Leu Ser Asp Leu Pro Glu Val Arg Tyr Pro Leu Phe Val Ala Phe Val
            20
                                25
Ile Ile Tyr Gln Ile Thr Leu Leu Gly Asn Gly Leu Ile Leu Leu Ala
                            40
Ile Val Thr Glu Lys Lys Leu Gln Thr Pro Met Tyr Tyr Leu Leu Ala
                        55
Asn Leu Ser Leu Leu Asp Ile Phe Cys Pro Ser Ala Thr Val Pro Lys
                    70
                                        75
Met Leu Lys Asn Leu Leu Thr Glu Asp His Ser Ile Ser Phe Val Gly
                                    90
Cys Ala Leu Gln Leu Tyr Phe Leu Val Ala Leu Ala Gly Thr Glu Val
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
Pro Leu Arg Tyr Ser Leu Ile Met Thr Lys Val Arg Cys Val Gln Leu
                        135
                                            140
Leu Phe Gly Thr Trp Ala Ala Gly Phe Leu Asn Ser Phe Val His Thr
                    150
Met Ser Thr Phe Ser Leu Ser Phe Cys Lys Ser Asn Arg Val Asn Gln
                                    170
                165
Tyr Tyr Cys Asp Ile Pro Pro Val Val Ala Leu Ser Cys Ser Ser Thr
                                185
Tyr Met Ala Glu Met Leu Val Leu Val Ile Gly Gly Ile Cys Gly Val
        195
                            200
Gly Ala Phe Leu Ile Thr Leu Ile Ser Tyr Ile Tyr Ile Val Ser Thr
                        215
Ile Leu Lys Ile Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Leu Val Val Phe Leu Phe Tyr Gly Thr Thr Ile
                                    250
Phe Thr Tyr Ile Arg Pro Thr Ser Ser Gln His Ser Pro Gly Arg Asp
                                265
Arg Leu Ile Ser Met Leu Tyr Gly Val Ile Thr Pro Met Leu Asn Pro
                            280
Ile Ile Tyr Ser Leu Arg Asn Thr Glu Val Lys Gly Ala Leu Arg Lys
                        295
Val Leu His Leu Arg Ile Cys Ser Gln Arg Glu
                    310
<210> 2019
<211> 317
<212> PRT
<213> Mus musculus
<400> 2019
Met Glu Met Asp Val Tyr Asn Leu Thr Thr Val Thr Gln Phe Ile Leu
                                    10
Ile Gly Leu Ser Asp Leu Pro Glu Val Arg Tyr Pro Leu Phe Val Ala
Phe Val Ile Ile Tyr Gln Ile Thr Leu Leu Gly Asn Gly Leu Ile Leu
```

<210> 2018

```
Leu Ala Ile Val Thr Glu Lys Lys Leu Gln Thr Pro Met Tyr Tyr Leu
                        55
Leu Ala Asn Leu Ser Leu Leu Asp Ile Phe Cys Pro Ser Ala Thr Val
                    70
                                        75
Pro Lys Met Leu Lys Asn Leu Leu Thr Glu Asp His Ser Ile Ser Phe
Val Gly Cys Ala Leu Gln Leu Tyr Phe Leu Val Ala Leu Ala Gly Thr
            100
                                105
Glu Val Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile
                            120
                                                125
Cys Phe Pro Leu Arg Tyr Ser Leu Ile Met Thr Lys Val Arg Cys Val
                        135
                                            140
Gln Leu Leu Phe Gly Thr Trp Ala Ala Gly Phe Leu Asn Ser Phe Val
                    150
                                        155
His Thr Met Ser Thr Phe Ser Leu Ser Phe Cys Lys Ser Asn Arg Val
                165
                                    170
                                                        175
Asn Gln Tyr Tyr Cys Asp Ile Pro Pro Val Val Ala Leu Ser Cys Ser
            180
                                185
                                                    190
Ser Thr Tyr Met Ala Glu Val Leu Leu Val Ile Ala Ser Ile Phe
       195
                            200
Gly Val Gly Ala Phe Leu Ile Thr Leu Ile Ser Tyr Ile Tyr Ile Val
                        215
                                            220
Ser Thr Ile Leu Lys Ile Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe
                    230
                                        235
Ser Thr Cys Ala Ser His Leu Leu Val Val Phe Leu Phe Tyr Gly Thr
                245
                                    250
                                                         255
Thr Ile Phe Thr Tyr Met Arg Pro Thr Ser Ser Gln His Ser Pro Gly
                                265
            260
Arg Asp Arg Leu Ile Ser Met Leu Tyr Gly Val Ile Thr Pro Met Leu
       275
                            280
Asn Pro Ile Ile Tyr Ser Leu Arg Asn Thr Glu Val Lys Gly Ala Leu
                        295
Arg Lys Val Leu His Leu Arg Ile Cys Ser Gln Thr Ala
                    310
<210> 2020
<211> 312
<212> PRT
<213> Mus musculus
<400> 2020
Met Ile Gly Glu Arg Asn Ile Thr Thr Ile Thr Gln Phe Ile Leu Leu
                                    10
Gly Phe Ser Asp Phe Pro Arg Ile Thr Val Leu Leu Phe Val Ile Phe
            20
                                25
Leu Met Ile Tyr Ile Met Thr Met Thr Trp Asn Leu Ser Leu Ile Ala
                            40
Leu Ile Arg Met Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
                                            60
Ser Asn Leu Ser Phe Ile Asp Leu Cys Phe Val Thr Ser Thr Ala Pro
                                        75
Lys Met Leu Ser Asn Phe Phe Gln Glu Asn Gln Thr Ile Ser Phe Val
Gly Cys Ile Val Gln Tyr Phe Ile Leu Ser Thr Met Gly Leu Thr Glu
```

Cys Cys Leu Met Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys

```
Asn Pro Leu Leu Tyr Ser Ser Val Met Ser Pro Thr Leu Cys Ala Gln
                        135
Met Val Met Gly Ser Tyr Thr Ala Gly Leu Thr Gly Ser Val Ser Gln
                    150
                                        155
Ile Cys Ala Leu Leu Gln Leu Tyr Phe Cys Gly Pro Asn Val Ile Arg
                                    170
                165
His Phe Phe Cys Asp Ile Ser Gln Leu Leu Asn Leu Ser Cys Ser Asp
           180
Ala Phe Phe Val Gln Val Leu Leu Ala Ile Leu Thr Met Cys Phe Gly
                            200
Ile Ala Asn Ala Leu Ala Thr Met Leu Ser Tyr Gly Phe Ile Val Leu
                                            220
Ser Ile Leu Lys Ile Thr Ser Ala Lys Gly Arg Ser Lys Ala Phe Asn
                                        235
                    230
Thr Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Tyr Ser Thr Gly
                                    250
Ile Phe Val Tyr Leu Arg Ser Ser Ser Gly Ser Ser Ser Phe Asp
                                265
Arg Phe Thr Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                            280
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala Met Lys Arg
                       295
                                            300
Leu Gln Lys Lys Ile Cys Asn
```

<210> 2021 <211> 311 <212> PRT

<213> Mus musculus

<400> 2021

Met Glu Pro Gly Asn Leu Thr Trp Val Ser Glu Phe Ile Phe Leu Gly Phe Ser Glu Ile Trp Glu Leu Gln Val Phe Leu Phe Val Val Phe Leu Cys Val Tyr Ser Thr Thr Val Val Gly Asn Leu Leu Ile Ile Val Thr 40 Val Ser Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg Asn Leu Ala Val Leu Asp Leu Cys Phe Ser Ser Val Thr Ala Pro Lys 70 Met Leu Val Asp Phe Leu Ser Glu Lys Lys Thr Ile Ser Tyr Arg Gly 90 Cys Met Val Gln Ile Phe Phe His Phe Leu Gly Gly Ala Met Val 105 Phe Phe Leu Ser Val Met Ala Tyr Asp Arg Leu Val Ala Ile Ser Arg 120 Pro Leu His Tyr Val Thr Ile Met Asn Ser Gln Leu Cys Met Gly Leu 135 Val Val Ala Ser Trp Val Gly Gly Phe Ala His Ser Ile Val Gln Leu 150 155 Ser Leu Met Leu Pro Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Asn 165 170 175 Phe Tyr Cys Asp Val Pro Gln Val Leu Arg Leu Ala Cys Met Asp Thr 180 185 190 Ser Leu Leu Glu Phe Leu Met Ile Ser Asn Ser Gly Met Leu Asp Val 200 Ile Trp Phe Phe Leu Leu Ile Ser Tyr Leu Val Ile Leu Val Met

```
220
   210
                        215
Leu Arg Ser His Ser Gly Glu Ala Arg Arg Lys Ala Ala Ser Thr Cys
                                        235
                    230
                                                             240
Thr Thr His Ile Ile Val Val Ser Met Ile Phe Ile Pro Ser Ile Tyr
                245
                                    250
Leu Tyr Ala Arg Pro Phe Thr Pro Phe Thr Met Asp Lys Ala Val Ser
                                265
                                                    270
Ile Ser His Thr Val Leu Thr Pro Met Leu Asn Pro Met Ile Tyr Thr
                            280
Leu Arg Asn Gln Glu Met Gln Ala Ala Met Lys Arg Leu Ala Lys Arg
                        295
                                            300
Leu Ala Leu Cys Asn Arg Glu
                    310
<210> 2022
<211> 313
<212> PRT
<213> Mus musculus
<400> 2022
Met Glu Thr Gln Asn Ile Thr Trp Val Ser Glu Phe Ile Leu Leu Gly
                                    10
Phe Ser Gln Thr Gln Glu Leu Gln Lys Leu Leu Phe Val Val Phe Leu
                                25
Cys Val Tyr Ile Thr Thr Val Val Gly Asn Ile Leu Ile Met Ile Thr
        35
Val Thr Phe Asp Pro Arg Leu Asp Met Pro Met Tyr Phe Leu Leu Arg
                        55
                                             60
Asn Leu Ala Val Ile Asp Leu Ser Tyr Ser Thr Val Thr Ser Pro Lys
                    70
                                        75
Met Leu Val Asp Phe Phe His Lys Thr Lys Thr Ile Ser Tyr Gln Gly
                                    90
Cys Met Ala Gln Ile Phe Phe Phe His Leu Leu Gly Gly Gly Thr Val
                                105
                                                     110
Phe Phe Leu Ser Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Ser Arg
                            120
Pro Leu His Tyr Val Thr Ile Met Asn Thr Lys Leu Cys Val Gly Leu
                        135
                                            140
Val Val Ala Ser Trp Val Gly Gly Phe Ala His Ser Ile Val Gln Leu
                    150
                                        155
Ser Leu Met Leu Pro Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Asn
                                    170
Phe Tyr Cys Asp Val Pro Gln Val Leu Arg Leu Ala Cys Thr Asp Thr
            180
                                185
Ser Leu Leu Glu Phe Leu Met Ile Ser Asn Ser Gly Met Leu Val Leu
                            200
                                                 205
Ile Trp Phe Leu Leu Leu Ile Ser Tyr Thr Val Ile Leu Val Met
                                             220
Leu Arg Ser His Ser Gly Gln Ala Arg Arg Lys Ala Ala Ser Thr Cys
                    230
                                        235
Thr Thr His Ile Ile Val Val Ser Met Ile Phe Ile Pro Cys Ile Tyr
                245
                                    250
Ile Tyr Ser Arg Pro Phe Thr Pro Phe Pro Leu Asp Lys Ala Val Ser
            260
                                265
                                                    270
Ile Ser Tyr Thr Val Leu Thr Pro Met Leu Asn Pro Met Ile Tyr Thr
       275
                            280
                                                285
Leu Arg Asn Gln Glu Met Gln Ala Ala Met Lys Arg Leu Ala Glu His
```

```
Leu Val Leu Thr Lys Arg Asn Glu Leu
<210> 2023
<211> 311
<212> PRT
<213> Mus musculus
<400> 2023
Met Gln Pro Gly Asn Leu Thr Trp Val Ser Glu Phe Val Phe Leu Gly
Phe Ser Glu Ile Trp Glu Leu Gln Val Phe Leu Phe Val Val Phe Leu
Cys Val Tyr Ser Thr Thr Val Val Gly Asn Leu Leu Ile Ile Val Thr
                            40
Val Ser Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg
Asn Leu Ala Val Leu Asp Leu Cys Phe Ser Ser Val Thr Ala Pro Lys
Met Leu Val Asp Phe Leu Ser Glu Lys Lys Thr Ile Ser Tyr Gln Gly
                                    90
Cys Met Ala Gln Val Phe Phe Phe His Phe Leu Gly Gly Ala Met Val
                                105
Phe Phe Leu Ser Val Met Ala Tyr Asp Arg Leu Val Ala Ile Ser Arg
                            120
Pro Leu His Tyr Val Thr Ile Met Asn Thr Gln His Cys Val Val Leu
                        135
Val Val Thr Ala Trp Val Val Gly Phe Val His Ser Ile Val Gln Leu
                    150
                                        155
Ser Leu Met Leu Pro Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Asn
                165
                                    170
                                                        175
Phe Tyr Cys Asp Val Pro Gln Val Leu Arg Leu Ala Cys Thr Asp Thr
                                185
                                                    190
Ser Leu Leu Glu Phe Leu Met Ile Ser Asn Ser Gly Met Leu Asp Val
                            200
Ile Trp Phe Phe Leu Leu Ile Ser Tyr Leu Val Ile Leu Val Met
                        215
Leu Arg Ser His Ser Gly Glu Ala Arg Arg Lys Val Ala Ser Thr Cys
                    230
                                        235
Thr Thr His Ile Ile Val Val Ser Met Ile Phe Ile Pro Ser Ile Tyr
                                    250
Leu Tyr Ala Arg Pro Phe Thr Pro Phe Thr Met Asp Lys Ala Val Ser
                                265
Ile Ser His Thr Val Met Thr Pro Met Leu Asn Pro Met Ile Tyr Thr
                            280
Leu Arg Asn Gln Glu Met Gln Ala Ala Leu Lys Arg Leu Gly Met His
                        295
                                            300
Leu Leu Val Cys Arg Lys Glu
305
                    310
<210> 2024
<211> 309
```

```
<212> PRT
<213> Mus musculus
```

<400> 2024

Met Glu Ile Ile Asn Lys Thr Ala Lys Val Gln Phe Phe Arg Pro

```
Phe Ser Pro Asp Pro Gly Val Gln Met Val Ile Phe Val Thr Phe Leu
                                25
Val Met Tyr Leu Thr Ser Leu Ser Gly Asn Ala Thr Ile Ala Val Ile
                            40
Val His Ile Asn His Ser Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
Asn Leu Ala Val Leu Glu Ile Phe Tyr Thr Ser Ser Ile Ala Pro Leu
                    70
Ala Leu Ala Asn Leu Leu Ser Met Gly Lys Thr Pro Val Ser Ile Thr
                                    90
Gly Cys Gly Thr Gln Met Phe Phe Phe Val Phe Leu Gly Gly Ala Asp
            100
                                105
                                                    110
Cys Val Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
       115
                            120
Tyr Pro Leu Arg Tyr Thr Leu Ile Met Ser Trp Ser Leu Cys Val Glu
                        135
                                            140
Met Met Val Gly Ser Leu Val Leu Gly Phe Leu Leu Ser Leu Pro Leu
                    150
                                        155
Thr Ile Leu Ile Phe His Leu Pro Phe Cys His Asn Asn Glu Ile Tyr
                165
                                    170
His Phe Tyr Cys Asp Met Pro Ala Val Ile Arg Leu Ala Cys Gly Asp
            180
                                185
                                                    190
Thr His Val His Arg Thr Ala Leu Tyr Ile Ile Ser Phe Ile Val Leu
        195
                            200
Ser Ile Pro Leu Thr Leu Ile Ser Ile Ser Tyr Val Phe Ile Ile Thr
                        215
Ala Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg His Arg Ala Phe Ser
                    230
Thr Cys Ser Ser His Ile Val Val Leu Leu Gln Tyr Gly Cys Thr
                                    250
Ser Phe Ile Tyr Leu Ser Pro Ser Ser Ser Tyr Ser Pro Glu Met Gly
            260
                                265
Arg Met Val Ser Val Val Tyr Thr Phe Ile Thr Pro Ile Leu Asn Pro
                            280
Leu Ile Tyr Ser Met Arg Asn Lys Glu Leu Lys Asp Ala Leu Arg Lys
                                             300
Ala Leu Arg Lys Phe
305
<210> 2025
<211> 313
<212> PRT
<213> Mus musculus
<400> 2025
Met Asp Lys His Asn Leu Thr Val Val Thr Glu Phe Ile Leu Met Gly
                                    10
Ile Thr Glu Asn Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu
Val Ile Tyr Leu Thr Ser Val Ile Gly Asn Leu Gly Ile Ile Ile Leu
        35
                            40
Thr Asn Val Asp Ala Lys Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg
                        55
                                            60
His Leu Ala Phe Thr Asp Phe Val Tyr Ser Thr Thr Val Gly Pro Lys
                    70
                                        75
                                                             80
```

Met Leu Val Asn Phe Val Val Asp Gln Asn Ala Ile Ser Tyr Ser Leu

```
Cys Ala Thr Gln Leu Ala Phe Phe Leu Leu Phe Ile Gly Ser Asp Leu
Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu Leu Tyr Thr Val Ile Met Ser His Lys Val Cys Trp Val Leu
                        135
Val Thr Met Thr Tyr Leu Tyr Cys Thr Phe Met Ser Leu Val Val Thr
                    150
                                        155
Ile Asn Ile Phe Ser Leu Ser Phe Cys Gly Tyr Asn Val Ile Asn His
                                    170
                165
Phe Phe Cys Asp Cys Ile Pro Leu Ile Ser Leu Leu Cys Ser Asn Thr
            180
                                185
Gln Glu Val Glu Leu Ile Val Met Ile Phe Ala Ala Phe Asp Leu Ile
                            200
                                                205
Ser Ser Leu Val Val Val Leu Met Ser Tyr Leu Leu Ile Leu Ile Ala
Val Leu Arg Met Asn Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Val Val Thr Val Phe Tyr Gly Thr Leu Ile
                                    250
Phe Met Tyr Val Gln Pro Glu Ser Ser His Ser Ile Asp Thr Asp Lys
                                265
Ile Ser Ser Ile Phe Tyr Thr Leu Ile Ile Pro Leu Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Gln Arg Thr
   290
                        295
Trp Gln Lys Ile Phe Asn Thr Phe Ser
305
                    310
<210> 2026
```

```
<211> 313
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<212> PRT

<213> Mus musculus

<400> 2026

Met Glu Asn Gln Asn Arg Thr Val Val Thr Glu Phe Ile Leu Met Gly 10 Ile Thr Asp His Pro Glu Leu Gln Ser Ser Leu Phe Gly Leu Phe Leu 20 25 Leu Ile Tyr Leu Ile Ser Leu Val Gly Asn Leu Gly Met Ile Val Leu 35 40 Thr Met Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg 55 60 His Leu Ala Thr Thr Asp Leu Gly Tyr Ser Thr Thr Val Gly Pro Lys 70 7.5 80 Met Leu Thr Asn Phe Ile Val Asp Gln Asn Arg Ile Ser Phe Asn Leu 85 90 Cys Ala Thr Gln Leu Ala Phe Phe Leu Leu Phe Ile Ala Cys Glu Leu 100 105 110 Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 125 Pro Leu Phe Tyr Met Val Ile Met Ser Lys Arg Leu Cys Trp Val Leu 135 140 Val Val Ile Pro Tyr Val Tyr Cys Thr Ile Val Ala Leu Leu Ile Thr 150 155 Ile Lys Ile Phe Thr Leu Ser Phe Cys Gly Ser Asn Val Ile Ser His 170 165 Phe Tyr Cys Asp Ser Leu Pro Leu Leu Ser Leu Val Cys Ser Asn Thr

```
185
Gln Glu Ile Glu Val Ile Met Leu Phe Leu Ser Ala Phe Asn Leu Ile
                            200
                                                 205
Ser Ser Leu Leu Val Leu Val Ser Tyr Leu Leu Ile Leu Ile Ala
                        215
                                            220
Ile Leu Arg Met Asn Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Val Asp Thr Val Phe Tyr Gly Thr Leu Ile
                                    250
Phe Met Tyr Met Gln Pro Lys Ser Ser His Ser Phe Asp Thr Asp Lys
                                265
Leu Ala Ser Val Phe Tyr Thr Leu Ile Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Leu His Arg Thr
                        295
                                            300
Gly Lys Lys Leu His Ser Val Cys Phe
                    310
<210> 2027
<211> 315
<212> PRT
<213> Mus musculus
<400> 2027
Met Gln Met Glu Ser Gln Asn Leu Thr Val Val Thr Glu Phe Ile Leu
                                    10
Arg Gly Ile Thr Asp Arg Pro Glu Leu Gln Val Pro Leu Phe Gly Leu
                                25
Phe Phe Met Ile Tyr Leu Ile Ser Leu Phe Gly Asn Leu Gly Met Ile
Ile Leu Thr Ile Val Glu Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe
                        55
Leu Arg His Leu Ala Ile Thr Asp Leu Gly Tyr Ser Thr Ala Ile Gly
                    70
                                        75
Pro Lys Met Leu Ala Asn Phe Val Val Ser Lys Asn Thr Ile Ser Phe
                                    90
                85
His Leu Cys Ala Thr Gln Leu Ala Phe Phe Leu Leu Phe Ile Ala Cys
                                105
            100
                                                     110
Glu Leu Phe Ile Leu Ser Val Met Ser Tyr Asp Arg Tyr Val Ala Ile
                            120
                                                 125
Cys Asn Pro Leu Leu Tyr Asn Val Ile Met Ser Gln Thr Val Cys Trp
                        135
Val Leu Val Ala Ile Pro Tyr Leu Tyr Ser Val Phe Ile Ser Leu Ile
                    150
Val Thr Ile Asn Ile Phe Ser Ser Ser Phe Cys Gly Tyr Asn Val Ile
                                    170
Pro His Phe Tyr Cys Asp Gly Leu Pro Leu Ile Ser Leu Leu Cys Thr
            180
                                185
Asn Thr Asp Lys Ile Gly Leu Ile Ile Leu Ile Leu Ser Ala Ile Asn
        195
                            200
                                                 205
Leu Ile Ser Ser Leu Leu Ile Ile Leu Gly Ser Tyr Leu Leu Ile Phe
                        215
                                            220
Arg Ala Ile Leu Arg Met Asn Ser Ala Glu Gly Arg Arg Lys Ala Phe
                    230
                                        235
Ser Thr Cys Gly Ser His Leu Thr Val Val Ser Val Phe Tyr Gly Thr
                245
                                    250
                                                         255
Leu Ile Phe Met Tyr Val Gln Pro Lys Thr Ser His Ser Phe Asp Thr
                                265
            260
```

```
Asp Lys Val Ala Ser Ile Phe Tyr Thr Leu Val Ile Pro Met Leu Asn
                           280
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Tyr Ala Leu Arg
                       295
Lys Thr Gly Lys Ile Ile Gln Asn Asn Phe Ser
<210> 2028
<211> 313
<212> PRT
<213> Mus musculus
<400> 2028
Met Glu Asn His Asn Leu Thr Met Val Thr Glu Phe Ile Leu Val Gly
                                   10
Ile Thr Asp Arg Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu
                               25
Ile Ile Tyr Leu Ile Thr Leu Val Gly Asn Leu Gly Met Ile Ile Leu
                           40
Thr Met Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg
His Leu Ala Thr Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys
                   70
                                       75
Met Leu Arg Asn Phe Leu Val Glu Gln Asn Thr Ile Ser Ile Tyr Phe
              85
                                   90
Cys Ala Val Gln Leu Ser Phe Phe Ser Met Phe Ile Val Ser Glu Phe
          100
                               105
                                                  110
Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                           120
       115
                                              125
Pro Leu Leu Tyr Asn Val Ile Met Ser Gln Arg Val Cys Trp Leu Leu
                       135
                                           140
Val Ala Ile Pro Tyr Leu Tyr Ser Ile Phe Val Ala Leu Ile Val Thr
                   150
                                       155
Ile Asn Ile Phe Ser Ser Phe Cys Gly His Asn Ile Ile Ser His
               165
                                   170
                                                       175
Phe Tyr Cys Asp Gly Leu Pro Leu Ile Ser Leu Leu Cys Ser Asn Lys
                                                  190
           180
                               185
Lys Glu Ser Glu Met Ile Ile Leu Ile Leu Ser Thr Ile Asn Leu Ile
                           200
       195
Ser Ser Pro Val Val Ile Leu Val Ser Tyr Leu Leu Ile Leu Arg Ala
                                           220
                       215
Ile Leu Lys Met Asn Ser Ala Glu Gly Arg Gln Lys Ala Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Thr Val Val Thr Val Phe Tyr Gly Thr Leu Ile
               245
                                   250
Phe Met Tyr Val Gln Pro Lys Ser Asn His Thr Leu Asn Thr Asp Lys
                               265
Val Ala Ser Ile Phe Tyr Thr Leu Ile Ile Pro Met Leu Asn Pro Leu
                           280
                                              285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Tyr Ala Leu Arg Lys Thr
                     295
Gly Lys Ser Ile Gln Asn Ile Phe Ser
                   310
<210> 2029
<211> 313
<212> PRT
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```
<400> 2029
Met Lys Lys Gln Asn Phe Thr Met Val Thr Glu Phe Ile Leu Val Gly
1
Ile Thr Asp Arg Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu
Ile Ile Tyr Leu Ile Thr Leu Val Gly Asn Leu Gly Met Ile Ile Leu
        35
Thr Met Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg
His Leu Ala Thr Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys
                    70
Met Leu Arg Asn Phe Leu Val Glu Gln Asn Thr Ile Ser Phe Tyr Ile
                                     90
Cys Ala Val Gln Leu Thr Phe Phe Asn Met Phe Ile Val Ser Glu Phe
            100
Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu Leu Tyr Asn Val Ile Met Ser Gln Arg Val Cys Trp Val Leu
                        135
Val Ala Ile Pro Tyr Ile Tyr Ser Ile Phe Val Ala Leu Leu Ile Ser
                    150
                                        155
Ile Asn Ile Phe Ser Ser Phe Cys Gly His Asn Ile Ile Ser His
                                    170
                165
                                                         175
Phe Tyr Cys Asp Gly Leu Pro Leu Ile Ser Leu Leu Cys Ser Tyr Arg
            180
                                185
                                                     190
Lys Glu Asn Glu Met Ile Thr Phe Ile Leu Ser Ile Ile Asn Leu Ile
        195
                            200
Thr Ser Pro Leu Val Ile Leu Ala Ser Tyr Leu Leu Ile Leu Arg Ala
                        215
                                             220
Ile Leu Arg Met Asn Ser Ala Glu Gly Arg Gln Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Val Val Thr Val Phe Tyr Gly Thr Leu Ile
                245
                                    250
Phe Met Tyr Val Gln Pro Lys Ser Ser Asp Ser Leu Lys Thr Asp Lys
            260
                                265
Val Ala Ser Ile Phe Tyr Ala Leu Ile Ile Pro Met Leu Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Ala Leu Arg Lys Thr
                        295
Gly Lys Thr Ile Gln Asn Ile Phe Ser
<210> 2030
<211> 298
<212> PRT
<213> Mus musculus
<400> 2030
Met Gly Leu Ser Asn Ser Arg Glu Leu Gln Ile Phe Leu Phe Ala Phe
                                    10
Phe Phe Val Phe Tyr Val Gly Ile Val Phe Gly Asn Leu Leu Ile Val
Ile Thr Val Thr Asn Asp Ser His Leu His Ser Pro Met Tyr Phe Leu
Leu Ala Asn Leu Ser Phe Ile Asp Leu Cys Val Ser Ser Val Thr Ala
```

```
Pro Lys Thr Ile Ala Asp Phe Phe Tyr Lys Arg Lys Val Ile Ser Val
Lys Gly Cys Phe Thr Gln Ile Phe Leu Leu His Phe Phe Gly Gly Ser
               85
Glu Met Val Thr Leu Val Ala Met Ala Phe Asp Arg Tyr Val Ala Ile
           100
                               105
Cys Lys Pro Leu Ser Tyr Thr Thr Val Met Arg Gly Asn Val Cys Val
       115
                           120
Ser Ile Val Ala Thr Ala Trp Ala Ile Gly Phe Leu His Ser Val Ser
                       135
                                           140
Gln Leu Ala Phe Ala Ile Ser Leu Pro Phe Cys Gly Pro Asn Arg Val
                   150
                                      155
Asp Ser Phe Tyr Cys Asp Leu Pro Arg Val Ile Lys Leu Ala Cys Ala
               165
                                   170
Glu Thr Tyr Arg Leu Asp Ile Met Val Ile Ala Asn Ser Gly Val Leu
                               185
          180
Ser Val Cys Ser Phe Val Leu Leu Ile Ile Ser Tyr Gly Ile Ile Leu
                           200
                                               205
    195
Met Thr Ile Gln Arg Arg Pro Ser Asp Arg Ser Ser Lys Ala Leu Ser
                                           220
                       215
Thr Leu Thr Ala His Ile Thr Val Val Leu Leu Phe Phe Gly Pro Cys
                                      235
                   230
Ile Phe Ile Tyr Ala Trp Pro Phe Pro Ile Lys Ser Leu Asp Lys Phe
               245
                                   250
Leu Ala Val Phe Tyr Ser Val Val Thr Pro Leu Leu Asn Pro Ile Ile
                               265
           260
Tyr Thr Leu Arg Asn Thr Glu Met Lys Thr Ala Met Arg Arg Leu Arg
                           280
Gln Trp Asn Leu Ser Phe Trp Val Lys Ser
```

```
<210> 2031
<211> 312
<212> PRT
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<213> Mus musculus

<400> 2031

Met Asp Gly Gly Asn Arg Ser Val Val Ser Glu Phe Ile Leu Gln Gly 10 Leu Ser His Ser Lys Asn Ile Gln Val Leu Leu Phe Val Ile Phe Leu 25 Met Leu Tyr Leu Phe Ile Val Ser Gly Asn Ile Val Ile Leu Thr Leu 35 40 Ile Thr Thr Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Ala 55 60 Asn Leu Ser Phe Val Asp Met Cys Leu Ser Ser Asn Ile Thr Pro Lys 70 75 Met Ile Thr Asp Phe Leu Arg Glu Asn Lys Thr Ile Ser Phe Ala Gly 90 8.5 Cys Met Ser Gln Val Phe Phe Thr His Cys Ile Ala Gly Gly Glu Met 100 105 Ile Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu His Tyr Phe Thr Ile Met Asn Leu Lys Arg Cys Thr Gly Leu 135 Val Leu Thr Ser Trp Thr Ile Gly Phe Ile His Gly Ile Ser Tyr Leu 150 Val Val Phe Val His Leu Pro Phe Cys Gly Pro Lys Glu Ile Asp Ser

```
165
                                    170
Phe Phe Cys Asp Met Pro Leu Ile Ile Lys Leu Ala Cys Met Asp Ser
            180
                                185
                                                    190
His Asn Leu Asn Thr Leu Met Asn Ala Glu Cys Gly Val Val Val Val
        195
                            200
                                                 205
Thr Cys Phe Ser Leu Leu Ile Ser Tyr Thr Tyr Ile Leu Val Thr
                                            220
                        215
Val Ser Lys Ser Ser Lys Ala Gly Ala Ser Lys Ala Leu Ser Thr Cys
                    230
                                        235
Ser Ala His Ile Thr Val Val Met Ile Phe Phe Val Pro Cys Ile Phe
                245
                                    250
Ile Tyr Val Trp Pro Leu Ser Ile Thr Trp Phe Asp Lys Phe Leu Ala
            260
                                265
Val Phe Tyr Ser Val Ile Thr Pro Leu Leu Asn Pro Thr Ile Tyr Thr
                            280
Leu Arg Asn Lys Glu Ile Lys Asn Ala Met Lys Arg Phe Ile Gly Lys
                        295
Phe Leu Gly Pro Lys Arg Asn Ser
                    310
<210> 2032
<211> 312
<212> PRT
<213> Mus musculus
<400> 2032
Met Asp Gly Glu Asn His Thr Val Val Ser Ala Phe Val Phe Leu Gly
                                    10
Leu Thr His Ser Trp Glu Ile Gln Leu Leu Leu Val Leu Ser Ser
                                25
Val Leu Tyr Ile Leu Ser Met Ala Gly Asn Ile Leu Ile Val Phe Ser
        35
                            40
                                                45
Val Thr Ile Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Ala
                        5.5
                                            60
Cys Leu Ser Phe Ile Asp Leu Val Ala Cys Ser Val Thr Ser Pro Lys
                    70
                                        75
Met Val Tyr Asp Leu Phe Arg Lys His Lys Val Ile Ser Phe Gly Gly
                                    90
Cys Ile Thr Gln Ile Phe Phe Ile His Leu Val Gly Gly Val Glu Met
            100
                                105
                                                    110
Val Leu Leu Val Ala Met Ala Phe Asp Arg Tyr Ile Ala Ile Cys Lys
                            120
                                                125
Pro Leu His Tyr Leu Thr Ile Met Ser Pro Arg Val Cys Val Leu Phe
                        135
                                            140
Leu Gly Ala Ala Trp Gly Leu Gly Ile Ser His Ser Leu Phe Gln Leu
                    150
                                        155
Ala Phe Leu Ile Asp Leu Pro Phe Cys Gly Pro Asn Thr Leu Asp Ser
                165
                                    170
                                                        175
Phe Tyr Cys Asp Leu Pro Lys Leu Leu Arg Leu Ala Cys Arg Asp Thr
            180
                                185
                                                    190
Tyr Lys Leu Gln Phe Met Val Thr Ile Asn Ser Gly Phe Ile Cys Val
        195
                            200
                                                205
Gly Ser Phe Leu Leu Leu Ile Ser Tyr Ile Phe Ile Leu Phe Ser
                        215
                                            220
Val Trp Lys His Ser Ser Gly Gly Ser Ser Lys Ala Leu Ser Thr Leu
                    230
                                        235
Ser Ala His Ile Thr Val Val Phe Leu Phe Phe Gly Pro Thr Leu Phe
```

Ile Tyr Thr Trp Pro His Pro Asn Ser Gln Ile Asp Lys Phe Leu Ala 260 265 Leu Phe Asp Ala Val Leu Thr Pro Phe Leu Asn Pro Val Ile Tyr Thr 275 280 285 Phe Arg Asn Lys Glu Met Lys Val Ala Ile Arg Arg Val Phe Lys Thr 295 300 Leu Leu Thr Phe Arg Gly Ile Ser 310 <210> 2033 <211> 312 <212> PRT <213> Mus musculus

<400> 2033 Met Ile Arg Ala Asn His Ser Ala Val Ser Glu Phe Val Leu Leu Gly Leu Ser Asn Ser Trp Glu Ile Gln Val Phe Ile Phe Phe Thr Cys Leu Phe Tyr Val Ser Ser Leu Thr Gly Asn Phe Ile Ile Val Val Thr 35 40 Val Thr Ser Asp Pro Tyr Leu His Ser Pro Met Tyr Phe Leu Leu Ala Asn Leu Ser Val Ile Asp Leu Ile Phe Cys Ser Ile Ala Ala Pro Lys 70 Met Ile Cys Asp Leu Phe Arg Lys Gln Lys Val Ile Ser Phe Gly Gly 90 Cys Ile Ser Gln Ile Phe Phe Ser His Ala Val Gly Gly Thr Glu Met 105 Val Leu Leu Ile Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu Arg Tyr Leu Thr Ile Met Ser Pro Arg Met Cys Leu Leu Ile 135 140 Leu Val Ala Ala Trp Ile Ile Gly Leu Ile His Ser Ser Ala Gln Leu 150 155 Ala Phe Val Ile Asn Leu Pro Phe Cys Gly Pro Asn Ile Leu Asp Ser 170 175 Phe Tyr Cys Asp Ile Pro Arg Leu Val Lys Leu Ala Cys Thr Asp Thr 185 190 Tyr Lys Leu Glu Leu Met Ile Thr Ala Asn Ser Gly Phe Ile Ser Leu 200 Ile Ala Phe Phe Leu Leu Ile Ile Ser Tyr Val Phe Leu Leu Thr Thr 220 Val Gln Lys Gln Ser Ser Gly Cys Ser Ser Lys Ala Leu Ser Thr Leu 230 235 Leu Ala His Ile Thr Val Val Val Leu Phe Phe Gly Pro Leu Ile Phe 245 250 Phe Tyr Val Cys Pro Ser Pro Ser Thr His Val Asp Lys Phe Leu Ala 260 265 Ile Phe Asp Ala Val Leu Thr Pro Phe Leu Asn Pro Ile Ile Tyr Thr 275 280 Leu Arg Asn Arg Asp Met Lys Ile Ala Ile Arg Lys Val Phe Cys Gln 295 300 Cys Leu Ala Phe Arg Lys Ser Met

310

```
<212> PRT
<213> Mus musculus
<400> 2034
Met Tyr Phe Pro Gln Leu Ser Asp Pro Met Asp Gln Val Asn Ala Ser
Ala Leu Pro Glu Phe Val Leu Leu Gly Leu Ala Gln Ser Phe Gly Thr
                                25
Gln Ile Phe Phe Gly Leu Phe Phe Ser Leu Phe Tyr Val Gly Ile Leu
Phe Gly Asn Leu Phe Ile Val Phe Ile Val Ile Val Asp Ser His Leu
                        55
His Phe Pro Met Tyr Ile Leu Leu Ala Asn Leu Ser Leu Ile Asp Leu
                    70
Gly Leu Ser Ser Thr Thr Ile Pro Arg Thr Ile Ser Asp Leu Phe Thr
                                    90
Gly Cys Lys Val Ile Ser Phe His Ser Cys Met Thr Gln Met Phe Phe
                                105
Ile His Val Met Gly Gly Val Glu Met Val Leu Leu Ile Ala Met Ala
        115
                            120
Tyr Asp Arg Tyr Ile Ala Ile Cys Lys Pro Leu His Tyr Leu Met Ile
                        135
                                            140
Met Asn Pro Lys Lys Cys Ile Ile Leu Val Ile Ala Ala Trp Val Ile
                    150
                                        155
Gly Met Ile His Ala Val Ser Gln Phe Leu Phe Val Val Asn Leu Pro
                165
                                    170
Phe Cys Gly Pro Tyr Asn Val Gly Ser Phe Tyr Cys Asp Phe Pro Arg
            180
                                185
                                                     190
Val Ile Lys Leu Ala Cys Met Asp Thr Tyr Lys Leu Glu Phe Val Val
                            200
Ser Ala Asn Ser Gly Phe Ile Ser Met Cys Thr Phe Phe Leu Ile
                        215
                                            220
Thr Ser Tyr Ile Phe Ile Leu Ala Ser Val Arg Gln His Ser Ser Thr
                    230
                                        235
Asp Leu Ser Lys Ala Phe Val Thr Leu Ser Ala His Ile Thr Val Val
                245
                                    250
Val Leu Phe Phe Ile Pro Cys Met Phe Leu Tyr Val Trp Pro Phe Pro
            260
                                265
                                                     270
Thr Lys Ser Leu Asp Asn Phe Phe Ala Ile Val Asp Phe Val Leu Thr
                            280
Pro Val Leu Asn Pro Thr Ile Tyr Thr Leu Arg Asn Lys Asp Met Arg
                        295
Leu Ala Ile Arg Arg Leu Ser Arg Gln Val Leu Ser Ser Arg Glu Phe
305
Ile
<210> 2035
<211> 311
<212> PRT
<213> Mus musculus
<400> 2035
Met Asp Pro Ser Asn Tyr Ser Thr Leu His Val Phe Ile Leu Leu Gly
                5
                                    10
Phe Ser Asp His Pro His Leu Glu Met Ile Leu Ser Gly Val Val Thr
```

25

20

<211> 321

```
Phe Phe Tyr Ile Ile Thr Leu Val Gly Asn Thr Ala Ile Ile Leu Ala
Ser Leu Leu Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Arg
Asn Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Ile Val Pro Gln
                    70
Met Leu Val Asn Leu Trp Gly Pro Glu Lys Thr Ile Ser Ser Val Gly
                                    90
Cys Ile Val Gln Leu Tyr Val Tyr Met Trp Leu Gly Ser Ile Glu Cys
                                105
Leu Leu Leu Ala Val Met Ser Tyr Asp Arg Phe Thr Ala Ile Cys Lys
                            120
                                                125
Pro Leu His Tyr Phe Val Ile Met Asn Pro Arg Leu Cys Val Lys Met
                       135
                                            140
Ile Val Met Val Trp Gly Ile Ser Leu Ala Asn Ser Val Ile Leu Cys
                   150
                                        155
Thr Leu Thr Val Asn Leu Pro Arg Cys Gly His Asn Ile Leu Asp His
               165
                                    170
                                                        175
Phe Leu Cys Glu Leu Pro Ala Met Val Arg Ile Ala Cys Val Asp Thr
                                185
                                                    190
Thr Lys Val Glu Leu Ser Val Phe Ala Leu Gly Ile Val Ile Val Leu
       195
                            200
Thr Pro Leu Ile Leu Ile Ser Tyr Gly Tyr Ile Ala Lys Thr
                       215
                                            220
Val Leu Asn Met Lys Ser Lys Ala Gly Gln Gln Lys Ala Met Asn Thr
                   230
                                        235
Cys Gly Ser His Leu Thr Val Val Ser Ile Phe Tyr Gly Ser Ile Ile
                                    250
               245
Tyr Leu Tyr Leu Gln Pro Gly Asn Arg Ala Ser Lys Asp Gln Gly Lys
                                265
Phe Leu Thr Leu Phe Tyr Thr Ile Ile Thr Pro Ser Leu Asn Pro Leu
                           280
Ile Tyr Thr Leu Arg Asn Arg Asp Met Lys Asp Ala Leu Lys Lys Leu
                      295
Met Arg Phe Tyr His Arg Phe
```

```
<210> 2036
```

<400> 2036

 Met
 Ile
 Pro
 Gly
 Gln
 Asn
 Gln
 Ser
 Trp
 Val
 Ser
 Glu
 Phe
 Ile
 Leu
 Ile
 Leu
 Ile
 Leu
 Ile
 Leu
 Phe
 Ile
 Leu
 Ile
 Val
 Phe
 Ile
 Leu
 Phe
 Ile
 Val
 Phe
 Ile
 Ile</th

<211> 313

<212> PRT

<213> Mus musculus

```
120
Tyr Pro Leu Arg Tyr Thr Val Ile Leu Asn Trp Gly Leu Cys Ile Arg
                        135
                                            140
Leu Ala Ala Gly Ser Trp Ile Cys Gly Phe Phe Ser Ser Leu Leu His
                    150
                                        155
Thr Phe Phe Thr Met Ser Leu Pro Tyr Cys Gly Pro Asn Arg Val Asn
                                    170
                                                         175
His Tyr Phe Cys Glu Gly Pro Ser Val Arg Ser Leu Ala Cys Met Asp
            180
                                185
                                                     190
Thr His Leu Ile Glu Met Val Asp Phe Val Leu Ser Val Phe Val Val
                            200
                                                 205
Val Ile Pro Ile Ser Leu Ile Val Ala Ser Tyr Ile Arg Ile Ala Met
                        215
Ala Ile Leu Lys Ile Lys Ser Thr Gln Gly Arg Cys Lys Ala Phe Ser
                    230
                                         235
Thr Cys Ala Ser His Leu Thr Val Val Thr Phe Phe Tyr Ala Pro Ala
                245
                                    250
Thr Tyr Ile Tyr Leu Arg Pro Asn Ser Ser Tyr Ser Pro Glu Arg Asp
                                265
            260
Lys Gln Val Ser Leu Phe Tyr Asn Ala Phe Thr Ala Leu Leu Asn Pro
                            280
Val Val Tyr Ser Leu Arg Asn Lys Asp Ile Lys Arg Ala Phe Leu Lys
                        295
                                             300
Val Met Gly His Ser Arg Leu Asp Gln
                    310
<210> 2037
<211> 315
<212> PRT
<213> Mus musculus
<400> 2037
Met Lys Lys Met Asn Tyr Gln Glu Ile Gly Asn Tyr Thr Lys Val Thr
                                    10
Glu Phe Ile Leu Val Gly Leu Ser Arg His Pro Thr Ser Gln Ser Val
                                25
Val Phe Trp Thr Leu Met Phe Leu Tyr Ile Val Thr Leu Ala Gly Asn
        35
Ser Leu Ile Ile Phe Leu Val Gly Gly Asn Ser Gln Leu His Thr Pro
Met Tyr Phe Phe Leu Gly Asn Leu Ser Leu Leu Asp Leu Leu Phe Ser
                    70
Thr Ser Val Val Pro Leu Ile Met Val Asn Ser Leu Tyr Asn Phe Ser
                                    90
Thr Ile Ser Tyr Ser Ser Cys Phe Thr Gln Leu Ala Phe Arg Ala Phe
            100
                                105
                                                     110
Leu Ala Leu Ala Glu Cys Phe Leu Leu Ala Ile Met Ala Tyr Asp Arg
                                                 125
        115
                            120
Phe Val Ala Ile Ser Asn Pro Leu Arg Tyr Asn Leu Val Met Ser Ser
                        135
                                             140
Arg Val Cys Ile Phe Met Ala Leu Leu Ala Trp Met Ala Ala Leu Leu
                    150
                                         155
Leu Thr Val Leu Pro Ile Leu Ile Phe Pro Ile Ser Phe Cys Gly Gln
                                    170
                                                         175
                165
Asn Val Val Asn His Phe Ser Cys Glu Val Gln Ala Ile Phe Lys Leu
```

Leu Cys Ser Asn Thr Ile Ser Leu Gln Ile Met Met Ile Ala Cys Ala

```
Val Ile Ser Met Pro Val Pro Leu Met Phe Ile Leu Phe Ser Tyr Leu
                        215
Cys Ile Leu Lys Ala Val Leu Arg Ile His Pro Thr Lys Ala Arg Leu
Lys Ala Phe Ser Thr Cys Ala Ser His Leu Ile Val Val Thr Ile Tyr
                                    250
Phe Gly Thr Leu Ile Tyr Ile Tyr Met Arg Pro Gln Ser Lys Ile Ser
                                265
His Asn Gly Asp Lys Ile Val Ser Ile Phe Tyr Ala Ala Val Thr Pro
                            280
Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Ala
                        295
Val Leu Arg Arg Val Asn Cys Gly Val Lys Ser
                    310
<210> 2038
<211> 302
<212> PRT
<213> Mus musculus
<400> 2038
Met Lys Asn Ser Thr Val Leu Thr Glu Phe Val Leu Thr Gly Leu Thr
1
                                    10
Glu Ser Pro Glu Leu Gln Val Pro Leu Phe Leu Phe Leu Val Ile
                                25
Tyr Leu Ile Thr Ile Val Gly Asn Leu Gly Leu Ile Ala Leu Ile Trp
Asn Asp Pro His Leu His Ile Pro Met Tyr Phe Phe Leu Gly His Leu
                        55
Ala Phe Val Asp Ala Ser Leu Ser Ser Thr Val Ala Pro Lys Met Leu
                   70
                                        75
Leu Asp Phe Leu Gln Met Asn Lys Met Ile Ser Tyr Ser Glu Cys Met
               85
                                    90
Thr Gln Phe Phe Ile Phe Ala Ile Cys Val Thr Thr Glu Cys Phe Leu
           100
                                105
                                                    110
Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
Leu Tyr Pro Met Ile Met Thr Lys Arg Leu Cys Ile Cys Leu Leu Val
                        135
                                            140
Leu Ser Phe Val Gly Gly Ile Leu His Ser Ser Ile His Glu Gly Phe
                   150
                                        155
```

Leu Leu Leu Asn Phe Cys Asn Ser Asn Ile Val His His Phe Phe 165 170 175 Cys Asp Ile Val Pro Leu Leu Lys Ile Ser Cys Ala Asp Thr Thr Leu 180 185 190 Asn Phe Gln Leu Ile Phe Val Phe Ala Gly Ile Ile Gln Val Phe Thr 200 Val Val Ile Val Leu Val Ser Tyr Thr Leu Val Leu Phe Thr Ile Leu 215 220 Gln Arg Lys Ser Val Gln Ser Met Lys Lys Ala Phe Ser Thr Cys Gly 230 235 Ala His Leu Leu Ser Val Ser Leu Tyr Tyr Gly Pro Leu Leu Ile Met 250 245 Tyr Ile Phe Pro Val Ser Gln Glu Ala Asp Gly Gln Asp Ile Ile Asp 265 Ser Leu Phe Tyr Thr Val Ile Ile Pro Val Leu Asn Pro Ile Ile Tyr 280 Ser Leu Arg Asn Lys Gln Val Met Asp Ser Arg Lys Arg Cys

290 295 300

<210> 2039

```
<211> 303
<212> PRT
<213> Mus musculus
<400> 2039
Met Glu Lys Ile Asn His Ser Glu Ile Ser Glu Phe Ile Ile Leu Gly
                                    10
Leu Cys Asp Ser Trp Glu Leu Gln Ala Phe Phe Leu Val Ile Phe Thr
Ser Leu Tyr Leu Ile Thr Ile Phe Gly Asn Ile Phe Ile Val Val Leu
        35
                            40
Ile Ile Thr Asp Leu His Leu His Thr Pro Met Tyr Phe Leu Leu Ala
                        55
Asn Leu Ser Phe Ile Asp Phe Cys Leu Ser Ser Val Thr Thr Pro Lys
                    70
                                        75
Met Ile Ile Asp Phe Leu Lys Glu Ile Lys Thr Ile Ser Phe Gly Gly
                85
                                    90
Cys Met Cys Gln Ile Phe Phe Gly His Phe Phe Gly Gly Glu Met
            100
                                105
Val Leu Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
        115
                            120
                                                125
Pro Leu His Tyr Ser Asn Ile Met Ser Arg His Met Cys Ile Gly Leu
                        135
                                            140
Val Met Ala Ser Trp Met Ile Gly Phe Val His Ser Ile Ser Gln Leu
                    150
                                        155
Val Ile Ile Val Asn Leu Pro Phe Cys Gly Ser Arg Val Leu Asp Ser
                                    170
                165
Phe Phe Cys Asp Ile Pro Leu Val Ile Lys Leu Ala Cys Leu Asp Ile
            180
                                185
                                                     190
Tyr Val Leu Glu Ile Leu Ile Asn Ala Asp Ser Gly Val Leu Ala Ala
        195
                            200
                                                 205
Ile Cys Phe Val Leu Leu Val Ser Tyr Phe His Ile Leu Thr Thr
                        215
                                            220
Val Cys Leu His Ser Lys Asp Gly Ala Ser Lys Ala Leu Ser Thr Cys
                    230
                                        235
Thr Ala His Ile Thr Val Val Val Leu Phe Phe Gly Pro Cys Ile Phe
                245
                                    250
Ile Tyr Leu Trp Pro Val Ser Ile Thr Trp Val Asp Lys Phe Leu Ala
            260
                                                     270
                                265
Val Phe Tyr Ala Val Ile Thr Pro Leu Leu Asn Pro Ala Ile Tyr Thr
                            280
Leu Arg Asn Lys Glu Ile Lys Thr Ala Met Lys Arg Leu Gln Cys
<210> 2040
<211> 312
<212> PRT
<213> Mus musculus
<400> 2040
Met Asn Glu Ile Asn Tyr Thr Glu Val Ser Glu Phe Val Phe Leu Gly
                                    10
Leu Ser Thr Ser Lys His Ile Gln His Phe Phe Leu Ala Phe Ser Val
            20
```

```
Val Phe Tyr Val Thr Ile Val Leu Gly Asn Thr Leu Val Val Phe Thr
Leu Ala Phe Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Gly
                        55
                                            60
Asn Leu Ser Phe Ile Asp Leu Cys Leu Ser Thr Leu Thr Val Pro Lys
                    70
Met Ile Ser Asp Leu Ser Ser Gly His Asn Thr Ile Ser Phe Gln Gly
                                    90
Cys Val Phe Gln Ile Phe Val Leu His Val Leu Gly Ala Ser Glu Met
                                105
Val Leu Leu Val Ala Met Ala Trp Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu His Tyr Leu Thr Ile Met Ser Pro Arg Met Cys Leu Leu Leu
                        135
Leu Ser Gly Ala Trp Ile Ile Gly Phe Leu His Ser Val Ala Gln Leu
                    150
                                        155
Gly Phe Val Val His Leu Arg Phe Cys Gly Pro Asn Lys Ile Asp Ser
                165
                                    170
                                                        175
Phe Tyr Cys Asp Leu Pro Arg Phe Ile Lys Leu Ala Cys Ile Asp Asn
            180
                                185
                                                    190
Tyr Arg Met Glu Phe Met Val Ala Ala Asn Ser Gly Ile Ile Ser Ile
        195
                            200
                                                 205
Gly Thr Phe Phe Leu Leu Ile Ile Ser Tyr Ile Val Ile Leu Phe Asn
                        215
                                            220
Val Arg Lys His Ser Ser Gly Asp Leu Ser Lys Ala Leu Ser Thr Leu
                    230
                                        235
Ser Ala His Ile Ser Val Val Val Leu Phe Phe Gly Pro Cys Ile Phe
                245
                                    250
Val Tyr Met Trp Pro Phe Pro Thr Val Pro Val Asp Lys Phe Leu Ala
            260
                                265
                                                     270
Ile Leu Asp Phe Met Ile Thr Pro Ile Leu Asn Pro Ala Ile Tyr Thr
                            280
Leu Arg Asn Lys Asp Met Lys Val Ala Met Arg Lys Leu Ser Tyr Gln
                        295
                                            300
Phe Leu Asn Phe Arg Lys Met Ser
305
                    310
```

```
<210> 2041
```

<400> 2041

Met Phe Lys Lys Asn Tyr Thr Lys Val Ser Glu Phe Val Phe Leu Gly 10 Leu Ser Ser Ser Arg Lys Ile Arg Pro Phe Leu Leu Ala Phe Ser Met 20 25 Val Leu Tyr Val Ala Ile Val Leu Gly Asn Thr Leu Val Val Phe Thr 40 Leu Ala Phe Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Gly 55 60 Asn Leu Ala Phe Ile Asp Leu Cys Leu Ser Thr Leu Thr Val Pro Lys 75 70 Met Ile Ser Asp Leu Ser Ser Gly His Asn Ala Ile Ser Phe Gln Gly 90 8.5 Cys Val Phe Gln Ile Phe Val Leu His Val Leu Gly Ala Thr Glu Met 105 Val Leu Leu Val Ala Met Ala Trp Asp Arg Tyr Val Ala Ile Cys Lys

<211> 313

<212> PRT

<213> Mus musculus

```
120
        115
Pro Leu His Tyr Leu Thr Ile Met Ser Pro Arg Met Cys Leu Met Leu
                        135
                                            140
Leu Ser Gly Ala Trp Val Ile Gly Phe Leu His Ser Val Thr Gln Leu
                   150
                                        155
Ala Phe Ile Ile Lys Leu Asn Phe Cys Gly Pro Asn Glu Ile Asp Ser
                                    170
                                                        175
               165
Phe Tyr Cys Asp Leu Pro Gln Phe Ile Lys Leu Ala Cys Ile Asp Pro
                                185
           180
Lys Lys Met Gln Phe Met Val Thr Ala Asn Ser Gly Phe Ile Ser Met
        195
                            200
                                                205
Gly Thr Phe Leu Leu Ile Ile Ser Tyr Ile Val Ile Leu Phe Ile
                        215
                                            220
Val Arg Lys His Ser Ser Ser Gly Asp Leu Ser Lys Ala Leu Ser Thr
                    230
                                        235
Leu Ser Ala His Ile Ser Val Val Val Leu Phe Phe Gly Pro Cys Ile
                                                        255
                245
                                    250
Phe Val Tyr Met Trp Pro Phe Pro Thr Val Pro Val Asp Lys Phe Leu
            260
                                265
                                                    270
Ala Ile Leu Asp Phe Met Val Thr Pro Ile Leu Asn Pro Ala Ile Tyr
        275
                            280
Thr Leu Arg Asn Lys Asp Met Lys Val Ala Met Arg Arg Leu Ile Thr
                        295
Gln Leu Phe Asn Leu Arg Lys Ser Pro
                    310
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 2042

Met Pro Met Asp Gln Leu Asn Asp Ser Arg Val Ser Glu Phe Val Leu 1.0 Leu Gly Leu Ser Ser Ser Trp Glu Thr Lys Val Phe Leu Met Val Thr Phe Ser Met Leu Tyr Ile Gly Ile Ile Leu Gly Asn Leu Phe Ile Val Ile Leu Val Ile Ala Asp Ser His Leu His Ser Pro Met Tyr Phe Leu 5.5 Leu Ala Asn Leu Ser Leu Asn Asp Val Trp Val Ser Ser Thr Thr Val Pro Lys Met Ile Ser Asp Leu Leu Lys Glu His Lys Val Ile Ser Phe 8.5 His Asn Cys Met Thr Gln Ile Cys Phe Ile His Ile Met Gly Gly Val Glu Met Val Leu Leu Ile Ala Met Ala Phe Asp Arg Tyr Thr Ala Ile Cys Lys Pro Leu Arg Tyr Leu Ser Ile Met Ser Pro Arg Ile Cys Ile Ser Phe Val Ile Ala Gly Trp Val Thr Gly Val Val His Ala Met Ser Gln Phe Ser Phe Val Val Ser Leu Pro Phe Cys Gly Pro Asn Lys Val Asp Ser Phe Tyr Cys Asp Phe Pro Arg Ile Ile Gln Leu Ala Cys Thr Asp Gly Asp Lys Phe Glu Phe Val Val Ala Ala Asn Ser Gly Phe Met

```
        Ser
        Met
        Gly
        Thr
        Phe
        Leu
        Leu
        Leu
        Leu
        Ser
        Tyr
        Val
        Phe
        Ile
        Leu

        Val
        Thr
        Val
        Trp
        Gln
        Arg
        Ser
        Ser
        Gly
        Asp
        Leu
        Ser
        Lys
        Ala
        Leu
        Val

        225
        230
        230
        235
        235
        240
        240

        Thr
        Leu
        Ser
        Ala
        His
        Ile
        Thr
        Val
        Val
        Val
        235
        240
        240
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        270
        270
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<210> 2043 <211> 316 <212> PRT <213> Mus musculus

<400> 2043

Met Asp Gly Asn Lys Thr Phe Pro Ser Asp Phe Thr Phe Val Gly Leu Phe Thr His Asn Lys Ala Ser Gly Phe Leu Phe Ser Val Ile Cys Ala Thr Phe Phe Met Ala Ile Leu Ala Asn Gly Val Met Ile Phe Leu Ile 40 His Ile Asp Pro His Leu His Thr Pro Met Tyr Phe Leu Leu Ser His 55 Leu Ser Phe Ile Asp Met Met Tyr Ile Ser Thr Ile Val Pro Lys Ile 70 Leu Val Asp Tyr Ile Val Gly Lys Gly Ile Ile Ser Phe Ala Ala Cys 90 Thr Ala Gln Tyr Phe Leu Tyr Met Gly Phe Val Gly Ala Glu Phe Phe 100 105 Leu Leu Gly Leu Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro 120 115 Leu Arg Tyr Pro Val Leu Met Ser Arg Arg Val Cys Trp Phe Ile Leu 135 140 Ala Ser Ser Trp Phe Gly Gly Ala Leu Asp Ser Phe Leu Leu Thr Pro 150 155 Ile Thr Met Ser Leu Pro Phe Cys Ala Ser His Lys Ile Asn His Phe 165 170 Phe Cys Glu Ala Pro Thr Met Leu Arg Leu Ala Cys Gly Asp Lys Ala 180 185 190 Ile Tyr Glu Met Val Met Tyr Ile Cys Cys Val Val Met Leu Leu Val 200 Pro Phe Ser Val Val Ile Thr Ser Tyr Ala Gln Ile Leu Val Thr Val 215 220 His His Ile Lys Ser Glu Glu Gly Arg Lys Lys Ala Phe Ala Thr Cys 230 Ser Ser His Val Ile Val Val Thr Leu Phe Tyr Gly Ala Ala Leu Tyr 245 250 Thr Tyr Met Leu Pro Gln Ala Tyr His Thr Pro Leu Lys Asp Lys Ile 265 270 Phe Ser Ala Phe Tyr Thr Ile Leu Thr Pro Leu Leu Asn Pro Val Ile Tyr Ser Leu Arg Asn Arg Asp Val Ala Gly Ala Leu Lys Arg Val Ile

```
295
Ala Arg His Arg Gly Ala Cys Ser Val Glu Arg Lys
                    310
<210> 2044
<211> 316
<212> PRT
<213> Mus musculus
<400> 2044
Met Glu Asn His Asn Leu Thr Met Val Thr Glu Phe Ile Leu Met Gly
Ile Thr Ala Cys Pro Glu Leu Gln Pro Pro Leu Phe Val Leu Phe Leu
                                                     30
Ile Ile Tyr Leu Ile Ser Leu Ile Gly Asn Leu Gly Met Ile Ile Leu
        35
Thr Leu Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg
                        55
His Leu Ser Thr Thr Asp Leu Gly Tyr Thr Thr Ala Val Gly Pro Lys
                    70
                                         75
                                                             80
Met Leu Gln Asn Phe Leu Val Asp Gln Asn Thr Ile Ser Phe His Leu
                                    90
Cys Ala Ile Gln Leu Ser Phe Phe Ser Met Phe Ile Ala Cys Glu Ile
            100
                                105
Tyr Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys
        115
                            120
                                                 125
Pro Leu Phe Tyr Met Val Ile Met Ser Lys Arg Leu Cys Trp Val Leu
                        135
                                            140
Val Val Ile Pro Tyr Val Tyr Cys Thr Ile Val Ala Leu Leu Ile Thr
                    150
                                        155
Ile Lys Ile Phe Thr Leu Ser Phe Cys Gly Ser Asn Val Ile Ser His
                                    170
                165
Phe Tyr Cys Asp Ser Leu Pro Leu Leu Ser Leu Val Cys Ser Asn Thr
            180
                                185
                                                     190
Gln Glu Ile Glu Val Ile Leu Leu Tyr Leu Ser Ala Phe Asn Leu Ile
        195
                            200
Ser Ser Leu Leu Val Leu Val Ser Tyr Leu Leu Ile Leu Ile Ala
                        215
Ile Ile Arg Met His Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Met Val Thr Val Phe Tyr Gly Thr Leu Ile
                245
                                    250
Phe Met Tyr Met Gln Arg Lys Ser Ser His Ser Phe Asp Thr Asp Lys
                                265
Val Ala Ser Ile Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Leu His Arg Thr
                        295
Leu Lys Lys Ile His Gly Phe Leu Leu Lys Leu Thr
                    310
<210> 2045
<211> 309
<212> PRT
<213> Mus musculus
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<400> 2045

```
Met Ser Met Glu Asn Ser Ser Thr Gly Thr Lys Phe Ile Leu Leu Gly
Met Thr Asp Asn Tyr Gln Leu Ala Val Leu Leu Phe Gly Leu Phe Phe
Ile Ile Tyr Phe Ile Thr Val Leu Gly Asn Leu Gly Leu Val Val Leu
                            40
Ile Gln Val Ser His Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ser Phe Leu Asp Val Cys Phe Ser Ser Ile Thr Thr Pro Lys
                    70
Thr Leu Val Asn Leu Leu Ser Gln Leu Gln Glu Val Ser Phe Phe Gly
                                    90
Cys Met Ala Gln Met Gly Leu Phe Ile Val Phe Ala Ser Ala Glu Cys
           100
Asn Ile Leu Ala Ser Met Ala Tyr Asp Arg Tyr Thr Ala Ile Cys Arg
                            120
Pro Leu Leu Tyr His Ile Thr Met Ser Lys Val Arg Cys Leu Leu Leu
                        135
                                            140
Val Ala Gly Cys Tyr Leu Gly Gly Leu Leu Asn Met Val Ala Val Thr
                    150
                                        155
Thr Ser Ile Thr Gln Leu Ser Phe Cys Gln Pro Gln Val Ile Ser His
                165
                                    170
Phe Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ala Cys Ser Asp Pro
                                185
                                                    190
Trp Val Thr Gln Val Leu Val Val Gly Cys Gly Gly Phe Thr Leu Val
                            200
Thr Ser Val Met Val Ile Leu Val Ser Tyr Leu Ser Ile Phe Met Thr
                        215
                                            220
Ile Met Gly Ile Pro Ser Val Ser Gly Lys Gln Lys Ala Phe Ser Thr
                    230
Cys Ala Ser His Leu Thr Ala Val Ala Leu Tyr Tyr Gly Thr Thr Met
                245
                                    250
Tyr Thr Tyr Leu Gln Pro Ser Arg His Gly Ser Gln Ala Gly Asn Arg
                                265
Met Ile Ser Val Phe Tyr Thr Met Leu Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Val Ala Leu Gln Lys Ile
Leu Arg His Ser Gln
305
```

<210> 2046 <211> 308 <212> PRT

<213> Mus musculus

<400> 2046

 Met Ala Asn Leu Ser Thr Val Ser Val Phe Ile Leu Gln Gly Phe Ser

 1
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 10
 15

 Ala Val Pro Ala Leu Gln Leu Leu Ser Met Ala Ile Phe Leu Leu Ile
 20
 25
 30

 Tyr Leu Ala Ala Val Leu Gly Asn Val Ser Ile Met Ile Ala Val Thr
 40
 45

 Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Ile Lys His Leu
 50

 Ser Leu Val Asp Leu Cys Ser Thr Ser Thr Thr Leu Pro Arg Ala Leu

 65
 70

 Val Ala Thr Met Ala Asp Thr Lys Glu Ile Ser Leu Pro Ala Cys Ala

```
90
Ser Gln Leu Phe Ala Phe Val Cys Phe Gly Ser Leu Glu Cys Phe Leu
                                105
                                                    110
            100
Ile Thr Ala Met Ala Phe Asp Arg Cys Leu Ala Ile Tyr Arg Pro Leu
                            120
                                                 125
Thr Tyr Gly Val Thr Met Ser Ser Gln Thr Cys Val Ser Leu Val Val
                        135
                                            140
Val Ala Trp Val Ser Gly Leu Leu Phe Ser Thr Phe His Met Val Asn
                    150
                                        155
Thr Phe Ser Leu Pro Phe Cys Gly Pro Asn Met Ile Asp His Phe Phe
                165
                                    170
Cys Asp Ile Pro Pro Leu Met His Leu Ala Cys Gly Asp Thr Gln Gly
            180
                                185
                                                     190
His Glu Ala Ala Gly Phe Ile Val Ser Gly Cys Val Ile Met Thr Cys
        195
                            200
Phe Ala Leu Thr Cys Leu Ser Tyr Val Leu Ile Val Tyr Thr Val Val
                        215
His Ile Arg Ser Ala Ala Gly Arg Trp Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Leu Ala Thr Val Leu Leu Phe Tyr Gly Thr Gly Ser Ser Ala
                                    250
Tyr Met Gln Pro Thr Ala His Tyr Ser Pro Leu Gln Gly Arg Met Ala
                                265
Ala Ile Phe Tyr Ser Ile Leu Met Pro Thr Leu Asn Pro Leu Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Met Lys Ala Ala Leu Arg Lys Leu Tyr Pro
Gln Val Pro Ser
305
```

<211> 319

<212> PRT

<213> Mus musculus

<400> 2047

Met Leu Phe Cys Ser Pro Gln Met Glu Thr Ser Leu Glu Leu Thr Asn Met Thr Arg Val Gln Gln Phe Val Leu Leu Gly Phe Pro Thr Arg Leu 25 Gly Ile Arg Asp Ala Leu Phe Val Val Phe Leu Ser Leu Tyr Leu Leu 40 Thr Leu Leu Glu Asn Thr Leu Ile Ile Tyr Leu Ile Cys Ser His Lys Glu Leu His Lys Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Cys Leu 70 75 Glu Met Cys Tyr Val Ser Ala Thr Met Pro Thr Leu Leu Val Gly Leu Trp Thr Gly Pro Tyr His Ile Ser Phe Ile Thr Cys Met Thr Gln Leu 105 Phe Phe Phe Val Ser Leu Ile Cys Thr Glu Cys Thr Leu Leu Ala Ser 120 Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His Tyr Pro 140 Leu Leu Met Arg Pro Gln Val Cys Leu Gly Leu Ala Leu Ser Ser Trp 150 155 Leu Gly Gly Leu Val Val Ser Ala Ile Lys Thr Lys Cys Ile Ala Ser 170

```
Leu Ile Tyr Cys Gly Pro Asn Val Leu Asn Gln Phe Phe Cys Asp Val
            180
                                185
                                                    190
Ser Pro Leu Leu Asn Leu Ser Cys Thr His Val Ala Leu Thr Glu Leu
        195
                            200
Val Asp Phe Ile Ser Ala Ile Val Ile Phe Cys Gly Thr Leu Leu Val
                        215
                                            220
Ser Leu Ala Ser Tyr Ser Ala Ile Gly Met Ala Val Leu Arg Met Pro
                    230
Ser Ala Ala Arg Arg Lys Ala Phe Ser Thr Cys Ala Ser His Leu
                245
                                    250
Val Val Val Gly Ile Phe Tyr Ser Ala Ala Leu Phe Ile Tyr Cys Arg
            260
                                265
                                                    270
Pro Ser Arg Ile Lys Ser Met Asp Leu Asn Lys Val Leu Ser Val Ile
        275
                            280
Tyr Thr Val Val Thr Pro Leu Cys Asn Pro Ile Ile Tyr Cys Leu Arg
                        295
                                            300
Asn Lys Glu Val His Thr Val Leu Lys Lys Thr Leu His Trp Pro
                    310
```

<211> 305

<212> PRT

<213> Mus musculus

<400> 2048

Met Glu Leu Asn Arg Thr Gln Leu Thr Glu Phe Val Leu Arg Gly Ile Thr Asp Arg Ser Glu Leu Gln Val Pro Leu Phe Leu Val Phe Phe Leu Ile Tyr Val Ile Thr Met Val Gly Asn Leu Gly Leu Ile Phe Val Ile Trp Lys Asp Pro His Leu His Thr Pro Met Tyr Leu Phe Leu Gly Asn Leu Ala Phe Ala Asp Ala Cys Thr Ser Ser Val Thr Pro Lys Met Leu Met Lys Phe Ser Asn Lys Asn Asp Met Ile Ser Met Gly Glu Cys Phe Ala Gln Phe Tyr Phe Phe Cys Leu Ser Ala Thr Ala Glu Cys Phe Ile Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Val Val Val Met Ser Asn Arg Leu Cys Ile Gln Phe Ile Gly Val Ser Tyr Leu Ile Gly Leu Leu His Gly Leu Leu His Val Gly Leu Leu Phe Arg Leu Met Phe Cys Ser Ser Asn Val Ile Asn His Phe Tyr Cys Glu Ile Leu Pro Leu Tyr Arg Ile Ser Cys Thr Asp Pro Ser Ile Asn Val Leu Val Val Phe Ile Met Gly Ile Leu Ile Gln Val Ser Thr Phe Met Ser Ile Ile Val Ser Tyr Ile Leu Ile Leu Phe Ala Ile Leu Arg Thr Lys Ser Glu Arg Gly Arg Asn Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ser Ser Val Ser Leu Phe Tyr Gly Thr Leu Phe Ile Ile Tyr Val Leu Ser Gly Ser Asp Thr Asp Asn Tyr Gln Gly Lys Met

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260
                                265
Tyr Ser Leu Phe His Thr Ile Ile Ile Pro Leu Leu Asn Pro Phe Ile
                            280
                                                 285
Tyr Ser Leu Arg Asn Lys Glu Val Ile Gly Ala Leu Arg Lys Leu Arg
                        295
                                             300
Glu
305
<210> 2049
<211> 314
<212> PRT
<213> Mus musculus
<400> 2049
Met Leu Gly Asn His Thr Ser Ala Thr Glu Phe Tyr Leu Val Gly Phe
                                     10
Pro Gly Ser Val Asn Leu Arg His Ile Leu Phe Ala Thr Phe Cys Phe
            20
                                25
Phe Tyr Leu Val Thr Leu Val Gly Asn Thr Val Ile Ile Val Ile Val
                            40
Cys Val Asp Lys Arg Leu Gln Ser Pro Met Tyr Phe Phe Leu Val His
                        55
Leu Ser Ile Leu Glu Ile Leu Val Thr Thr Val Ile Val Pro Val Met
                    70
                                        75
Leu Trp Gly Leu Leu Pro Gly Met Gln Ser Ile Ser Leu Ala Gly
                                     90
Cys Val Ala Gln Leu Phe Leu Gln Leu Ala Leu Gly Thr Thr Glu Phe
                                105
Ser Leu Leu Gly Ala Met Ala Val Asp Arg Tyr Val Ala Val Cys Asn
                            120
Pro Leu Arg Tyr Ser Val Ile Met Asn Ser Arg Thr Cys Asn Ser Val
                        135
                                             140
Val Ile Val Ser Trp Val Phe Gly Phe Leu Phe Gln Ile Trp Pro Val
                    150
                                        155
Tyr Ala Thr Phe His Leu Asn Tyr Cys Lys Ser Asn Val Val Asp Asn
                                    170
                                                         175
Phe Phe Cys Asp Arg Gly Gln Leu Leu Lys Leu Ser Cys Asn Asn Thr
            180
                                185
Ile Phe Ile Glu Phe Ile Leu Phe Leu Met Ala Val Phe Val Leu Phe
        195
                            200
Gly Ser Leu Ile Pro Thr Ile Val Ser Tyr Thr Tyr Ile Ile Ala Thr
   210
                        215
Ile Leu Lys Ile Pro Ser Ala Ser Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Phe Thr Cys Val Val Ile Gly Tyr Gly Cys Cys Leu
                245
                                    250
Phe Leu Tyr Val Lys Pro Lys Gln Thr Gln Ala Ala Asp Tyr Asn Arg
            260
                                265
                                                     270
Val Val Ser Leu Met Ile Ser Ile Val Thr Pro Phe Leu Asn Pro Phe
        275
                            280
Ile Phe Thr Leu Arg Asn Asp Lys Val Ile Glu Ala Leu Arg Asp Gly
                        295
                                             300
Val Lys Arg Cys Tyr His Phe Phe Lys Ser
                    310
```

Val Ile Asn Asp Ser Arg Leu Gln Ser Pro Met Tyr Phe Leu Leu Ala

```
Asn Leu Ser Leu Ile Asp Val Gly Leu Ser Ser Thr Thr Val Pro Lys
                    70
                                        75
                                                             80
Met Ile Ser Asp Leu Leu Lys Glu His Lys Val Ile Ser Phe His Ser
                                    90
                85
Cys Met Thr Gln Ile Cys Ser Ile His Ile Met Gly Gly Val Glu Met
            100
                                105
                                                     110
Val Leu Leu Ile Ala Met Ala Phe Asp Arg Tyr Thr Ala Ile Cys Lys
                            120
Pro Leu His Tyr Met Ser Ile Met Ser Pro Arg Ile Cys Ile Ser Phe
                        135
                                            140
Val Ile Ala Gly Trp Val Thr Gly Val Val His Ala Met Ser Gln Phe
                    150
                                        155
Ser Phe Val Val Asn Leu Pro Phe Cys Gly Pro Asn Lys Val Asp Ser
                                    170
                                                         175
                165
Phe Tyr Cys Asp Phe Pro Arg Ile Ile Gln Leu Ala Cys Thr Asp Arg
            180
                                185
                                                     190
Asp Thr Phe Glu Phe Val Val Ala Ala Asn Ser Gly Phe Met Thr Leu
        195
                            200
Gly Thr Phe Phe Leu Leu Leu Ser Tyr Val Phe Ile Leu Val Thr
                        215
Val Trp Gln Arg Ser Ser Gly Asp Leu Ser Lys Ala Leu Val Thr Leu
                                        235
                    230
Ser Ala His Ile Thr Val Val Val Leu Phe Phe Thr Pro Cys Met Phe
                245
                                    250
Leu Tyr Val Trp Pro Phe Pro Thr Ser Ser Thr Asp Lys Tyr Leu Phe
            260
                                265
Ile Val Asp Phe Ala Val Thr Pro Ala Leu Asn Pro Val Ile Tyr Thr
        275
                            280
Leu Arg Asn Lys Asp Met Lys Glu Ala Ile Lys Lys Leu Ser Lys Gln
                                             300
                        295
Arg Cys Tyr Ile Arg Ile Phe
<210> 2052
<211> 327
<212> PRT
<213> Mus musculus
<400> 2052
Met Lys Arg Lys Leu Arg His Leu Thr Val Val Met Ser Ile Tyr Asn
                                    10
Lys Ser Asp Val His Pro Ser Thr Phe Ile Leu Ile Gly Ile Pro Gly
                                25
Leu Glu Ala Ala His Met Trp Ile Ser Ile Pro Phe Cys Met Val Tyr
                            40
Val Leu Ala Leu Met Gly Asn Ser Ser Leu Leu Phe Ile Ile Lys Thr
                        55
Asp Ser Ser Leu His Glu Pro Met Tyr Leu Phe Leu Cys Met Leu Ala
```

Val Ala Asp Leu Val Val Cys Thr Thr Ala Val Pro Lys Leu Leu Ser

Leu Phe Trp Phe His Asp Gly Glu Ile Arg Phe Glu Ala Cys Leu Thr 105 Gln Ile Phe Leu Ile His Ser Cys Ser Thr Met Glu Ser Gly Phe Phe 120

Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg

135

125

140

```
His Ser Ala Ile Leu Thr His Thr Val Thr Gly Gly Ile Gly Leu Ala
                    150
                                        155
Val Val Ile Arg Gly Ile Ala Leu Leu Ser Pro His Pro Phe Leu Leu
                                   170
               165
Arg Trp Leu Pro Tyr Cys Lys Thr Asn Ile Ile Ser His Thr Tyr Cys
                               185
                                                   190
           180
Glu Phe Met Ala Leu Ile Lys Ile Ala Cys Ala Glu Thr Ser Ile Arg
                           200
Arg Ala Tyr Ser Leu Ile Val Ala Phe Leu Thr Gly Gly Val Asp Phe
                       215
                                           220
Ile Leu Ile Ile Cys Ser Tyr Val Leu Ile Leu Asn Thr Val Phe His
                   230
                                       235
Leu Pro Thr Lys Asp Ala Arg Leu Lys Thr Leu Gly Thr Cys Gly Ser
               245
                                    250
His Val Cys Val Ile Leu Val Ser Tyr Thr Pro Ala Phe Phe Ser Phe
                               265
           260
Leu Thr His Arg Phe Gly His Lys Val Ala Pro Gln Val His Ile Phe
                           280
Val Ala Asn Ile Tyr Leu Leu Val Pro Pro Met Val Asn Pro Ile Ile
                       295
                                            300
Tyr Gly Val Arg Thr Lys Lys Ile Arg Asn Arg Phe Leu Lys Val Phe
                   310
                                   315
Arg Phe Ser Lys His Thr Asn
```

<210> 2053 <211> 341 <212> PRT

<213> Mus musculus

<400> 2053

Met Gln Val Val Ser Leu Leu Pro Ser Gly Thr Leu Pro Gly Ser 10 Thr Met Met Pro Cys Asn Ser Thr Ser His Pro Ser Phe Phe Ile Leu 20 25 Gln Gly Ile Pro Gly Met Glu Asp Lys His Lys Trp Ile Ser Ile Pro 40 Phe Ser Ser Met Tyr Phe Ile Thr Val Met Gly Asn Cys Thr Ile Leu 55 Leu Thr Ile Ser Met Glu Arg Ser Leu His Lys Pro Met Phe Leu Leu 70 75 Leu Phe Phe Leu Ala Leu Thr Asp Leu Gly Met Ser Thr Thr Thr Ile 90 8.5 Pro Lys Val Leu Cys Ile Phe Trp Phe Gly Gln Ser Gln Ile Ser Tyr 100 105 Glu Gly Cys Leu Val Gln Leu Phe Phe Ile His Ser Ile Ser Ala Met 120 115 125 Gln Ser Ser Val Leu Met Thr Met Ala Phe Asp Arg Tyr Val Ala Ile 135 140 Cys Lys Pro Leu Arg Tyr Ser Thr Ile Leu Ser Asn Ser Arg Ile Gly 150 155 Leu Ile Gly Leu Ala Ser Leu Val Arg Ala Ile Leu Phe Ile Leu Pro 165 170 Met Pro Ile Leu Leu Gln Arg Met Pro Phe His Ala Asn Arg Val Ile 185 180 190 Pro Thr Tyr Cys Glu His Met Ala Val Val Lys Met Val Cys Val 200 Asp Thr Thr Phe Asn Arg Ile Tyr Gly Leu Val Val Ala Met Leu Val

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210
                        215
                                            220
Val Gly Val Asp Ile Ser Ala Ile Ala Ser Ser Tyr Ala Leu Ile Leu
                    230
                                        235
Arg Ala Ile Met His Leu Ser Ser Lys Glu Ala His His Lys Ala Val
                245
                                    250
Asn Thr Cys Thr Thr His Ile Cys Val Met Leu Val Ser Tyr Thr Pro
            260
                                265
Ser Leu Phe Ser Phe Leu Thr His Arg Phe Gly Arg Gly Ile Pro Pro
                            280
His Val His Thr Ile Leu Gly Asn Leu Tyr Phe Leu Val Pro Pro Met
                        295
Leu Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys Glu Phe Arg Asp Lys
                    310
                                        315
Ile Thr Lys Tyr Leu Tyr Arg Arg Lys Glu Pro Ile Ile Phe Ser His
Asn Gln Lys Leu Val
```

<210> 2054 <211> 327 <212> PRT

<213> Mus musculus

<400> 2054

Met Glu Arg Arg Asn His Thr Gly Arg Val Ser Glu Phe Val Leu Leu 5 10 Gly Phe Pro Ala Pro Ala Pro Leu Arg Ala Leu Leu Phe Phe Leu Ser 25 20 Leu Leu Ala Tyr Val Leu Val Leu Thr Glu Asn Ile Leu Ile Ile Thr 40 Ala Ile Arg Asn His Pro Thr Leu His Lys Pro Met Tyr Phe Phe Leu 55 Ala Asn Met Ser Phe Leu Glu Ile Trp Tyr Val Thr Val Thr Ile Pro 70 75 Lys Met Leu Ala Gly Phe Ile Gly Ser Glu Glu Asn His Gly Gln Leu 85 Ile Ser Phe Glu Ala Cys Met Thr Gln Leu Tyr Phe Phe Leu Gly Leu 105 Gly Cys Thr Glu Cys Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr 120 125 Val Ala Ile Cys His Pro Leu His Tyr Pro Val Ile Val Ser Ser Arg 135 Leu Cys Val Gln Met Ala Ala Gly Ser Trp Ala Gly Gly Phe Gly Ile 150 155 Ser Met Val Lys Val Phe Leu Ile Ser Arg Leu Ser Tyr Cys Gly Pro 165 170 175 Asn Thr Ile Asn His Phe Phe Cys Asp Val Ser Pro Leu Leu Asn Leu 180 185 190 Ser Cys Thr Asp Met Ser Thr Ala Glu Leu Thr Asp Phe Ile Leu Ala 200 Ile Phe Ile Leu Leu Gly Pro Leu Ser Val Thr Gly Ala Ser Tyr Met 215 220 Ala Ile Thr Gly Ala Val Met Arg Ile Pro Ser Ala Ala Gly Arg His 235 Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Ile Ile Phe 250 Tyr Ala Ala Ser Ile Phe Ile Tyr Ala Arg Pro Lys Ala Leu Ser Ala 265

 Phe
 Asp
 Thr
 Asn
 Lys
 Leu
 Val
 Ser
 Val
 Leu
 Tyr
 Ala
 Val
 Ile
 Val
 Pro

 Leu
 Leu
 Asn
 Pro
 Ile
 Ile
 Tyr
 Cys
 Leu
 Arg
 Asn
 Gln
 Glu
 Val
 Lys
 Lys
 Lys
 Lys
 Ser
 Arg
 Thr
 Leu
 His
 Leu
 Ala
 Gln
 Gly
 Gln
 Asp
 Ala
 Asn
 Thr

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<210> 2055 <211> 320 <212> PRT <213> Mus musculus

<400> 2055 Met Arg Asn His Thr Val Met Thr Thr Phe Ile Leu Leu Gly Leu Thr 10 Asp Asp Pro Gly Leu Gln Leu Leu Phe Phe Val Ile Leu Phe Leu Thr 20 25 Tyr Ile Leu Ser Ile Met Gly Asn Leu Thr Ile Ile Ile Leu Thr Leu 40 Met Asp Ser His Leu Asn Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe Ser Phe Leu Glu Ile Ser Phe Thr Thr Val Cys Ile Pro Arg Phe Leu Tyr Ser Ile Ser Thr Gly Val Asn Thr Ile Thr Tyr Asn Ala Cys Ala 90 Ser Gln Ile Phe Phe Val Gly Leu Phe Gly Ala Thr Glu Phe Phe Leu 105 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Met Thr Ile Met Asp Asn Lys Val Cys Ala Ile Leu Val Leu 130 135 Cys Cys Trp Thr Ser Gly Leu Leu Val Ile Ile Pro Leu Gly Met 150 155 Ile Leu Gln Leu Glu Phe Cys Asp Ser Asn Thr Ile Asp His Phe Phe 170 Cys Asp Ala Ser Pro Leu Ile Lys Ile Ser Cys Ser Asp Thr Trp Phe 185 Leu Glu Gln Thr Val Ile Val Cys Ala Val Leu Thr Phe Ile Ile Thr 200 Leu Ile Val Val Ile Leu Ser Tyr Ile Tyr Ile Ile Arg Thr Ile Leu 215 Arg Phe Pro Ser Ala His Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser 230 235 Ser His Met Ile Val Val Ser Ile Met Tyr Gly Ser Cys Ile Phe Ile 250 Tyr Val Thr Pro Ser Ala Lys Glu Gln Val Asp Ile Asn Lys Gly Val 265 Ser Met Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr 280 Thr Leu Arg Asn Lys Gln Val Lys Gln Ala Phe Asn Asp Thr Val Lys 295 300 Lys Leu His Thr Ser Tyr Thr Asn Lys Asn Met Leu Asp Leu Ser Ser 305 310 315 320

```
<211> 323
<212> PRT
<213> Mus musculus
<400> 2056
Met Thr Pro Arg Asn Met Thr Thr Val Ser Gly Phe Leu Leu Met Gly
                5
                                    10
1
Phe Ser Asp Asn His Glu Leu Gln Ile Leu Gln Ala Leu Leu Phe Leu
            20
                                25
Val Thr Tyr Leu Leu Asp Ser Ala Gly Asn Phe Ile Ile Ile Thr Ile
                            40
Thr Thr Ile Asp Lys Gln Leu Gln Ser Pro Met Tyr Tyr Phe Leu Lys
                                             60
                        55
His Leu Ser Ile Met Asp Phe Ser Ser Leu Ser Val Thr Val Pro Gln
                    70
                                        75
Tyr Val Asp Ser Ser Leu Ala Arg Ser Gly Tyr Ile Ser Tyr Gly Gln
                85
                                    90
Cys Met Leu Gln Val Phe Phe Phe Thr Gly Leu Ala Trp Ser Glu Val
           100
                                105
                                                    110
Ala Ile Leu Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Leu
                            120
        115
                                                125
Pro Leu His Tyr Glu Val Ile Met Ser Pro Arg Lys Cys Thr Trp Ala
                        135
                                            140
Val Ala Ala Val Trp Leu Ser Gly Gly Ile Ser Gly Thr Leu Phe Thr
                    150
                                        155
Ala Ser Thr Leu Ser Ile Arg Phe Cys Gly His Lys Ile Ile His Gln
                                    170
                165
Phe Phe Cys Asp Ile Pro Gln Leu Leu Lys Leu Ser Cys Ser Asn Asp
           180
                                185
                                                    190
Asp Phe Gly Leu Leu Lys Val Ser Thr Phe Ile Ala Val Met Gly Phe
        195
                            200
                                                205
Ala Cys Phe Val Gly Ile Ala Phe Ser Tyr Cys Gln Ile Phe Ser Thr
                                            220
                        215
Val Leu Arg Met Pro Ser Ala Glu Gly Arg Ser Lys Val Phe Ser Thr
                    230
                                        235
Cys Leu Pro His Leu Phe Val Val Ser Phe Phe Leu Ser Thr Gly Ile
                245
                                    250
Cys Ala Tyr Leu Lys Pro Thr Ser Asp Ser Pro Thr Ala Leu Asp Leu
                                265
Met Leu Ser Ile Phe Tyr Thr Val Leu Pro Pro Thr Leu Asn Pro Val
                            280
Ile Tyr Ser Leu Arg Asn Glu Ser Leu Lys Arg Ala Val Lys Lys Leu
                        295
                                            300
Leu Leu Ser Glu Glu Phe Ile Gly Lys Asn Tyr Val Cys Ser Val Phe
305
                    310
                                        315
Ser Ala Cys
<210> 2057
<211> 323
<212> PRT
<213> Mus musculus
<400> 2057
Met Glu Pro Gln Asn Leu Ser Lys Val Thr Glu Phe Gln Leu Leu Gly
1
                                    10
Phe Gln Asn Leu Leu Glu Trp Gln Ser Leu Leu Phe Ala Ile Phe Leu
                                25
```

```
Cys Phe Tyr Leu Leu Thr Ile Thr Gly Asn Met Val Ile Ile Gly Val
Val Ser Glu Asp Pro Arg Leu Arg Ala Pro Met Tyr Thr Phe Leu Gln
His Leu Ser Phe Leu Glu Ile Trp Tyr Thr Ser Thr Thr Val Pro Leu
Leu Leu Ser Asn Leu Ala Ser Trp Gly His Met Leu Ser Phe Ser Ala
Cys Met Ala Gln Leu Tyr Phe Phe Val Phe Phe Gly Ala Thr Glu Cys
                                105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys His
                            120
Pro Leu His Tyr Ser Leu Leu Met Ser Pro Asp Asn Cys Ala Ala Leu
                        135
Val Thr Val Ser Trp Val Thr Gly Val Gly Thr Gly Phe Leu Pro Ser
                    150
                                        155
Leu Leu Ile Ser Lys Leu Asp Phe Cys Gly Pro Asn Arg Ile Asn His
                165
                                    170
                                                        175
Phe Phe Cys Asp Leu Pro Pro Leu Ile Gln Leu Ser Cys Ser Ser Val
                                185
                                                    190
Tyr Val Thr Glu Met Ala Ile Phe Val Leu Ser Ile Ala Val Leu Cys
        195
                            200
Ile Cys Phe Leu Leu Thr Leu Val Ser Tyr Val Phe Ile Val Ser Ser
                        215
Ile Leu Arg Ile Pro Ser Thr Ser Gly Arg Met Lys Thr Phe Ser Thr
                    230
Cys Gly Ser His Leu Ala Val Val Thr Ile Tyr Tyr Gly Thr Met Ile
                245
                                    250
Ser Met Tyr Val Arg Pro Asn Ala His Leu Ser Pro Glu Leu Asn Lys
                                265
Val Ile Ser Val Phe Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Val
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Phe Lys Glu Ala Val Arg Lys Ile
                       295
Val Arg Thr Lys Cys Gly Val Tyr Arg Ala Arg Val Lys Gly Ser Ala
                    310
Leu Thr Thr
```

```
<210> 2058
<211> 325
```

<400> 2058

 Met
 Lys
 Tyr
 Phe
 Cys
 Leu
 Pro
 Arg
 Phe
 Ser
 Ile
 Ile
 Ser
 Met
 Leu
 Thr

 Gly
 Asn
 Gly
 Ser
 Phe
 Val
 Thr
 Glu
 Phe
 Val
 Leu
 Ala
 Gly
 Leu
 Thr
 Asp

 Arg
 Pro
 Glu
 Leu
 Pro
 Leu
 Phe
 Tyr
 Leu
 Asp
 Leu
 Ile
 Ile

<212> PRT

<213> Mus musculus

```
100
                                105
Gln Leu Phe Phe Leu Phe Phe Val Ile Ser Glu Cys Tyr Met Leu
                            120
                                            125
Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Leu
                       135
                                            140
Tyr Lys Val Thr Met Ser Pro Gln Val Cys Ser Met Leu Ser Phe Ala
                    150
                                        155
Ser Tyr Gly Met Ala Phe Ala Gly Ala Ser Ala His Thr Gly Cys Met
                165
                                    170
Leu Arg Leu Ile Phe Cys Asn Ala Asn Val Ile Asn Phe Tyr Leu Cys
                                185
Asp Ile Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr Tyr Val Asn
                            200
Glu Val Val Leu Ile Val Val Gly Ile Asn Ile Thr Val Pro Ser
                        215
Phe Thr Ile Leu Ile Ser Tyr Val Phe Ile Leu Ala Asn Ile Leu Asn
                    230
                                        235
Ile Lys Ser Thr Gln Gly Arg Ser Lys Ala Phe Ser Thr Cys Ser Ser
                                    250
His Ile Met Ala Ile Ser Leu Phe Phe Gly Ser Gly Ala Phe Met Tyr
Leu Asn His Ser Gly Ser Met Asp Gln Gly Lys Ile Ser Ser Val Phe
                            280
Tyr Thr Asn Val Val Pro Met Phe Asn Pro Leu Ile Tyr Ser Leu Arg
                        295
Asn Lys Asp Val Lys Ile Ala Leu Lys Lys Val Met Met Arg Val His
                    310
Ser Arg Phe Ile Ser
```

<211> 327

<212> PRT

<213> Mus musculus

<400> 2059

Met Asn Ser Glu Asn Phe Thr Arg Ser Arg Val Met Pro Ala Glu Phe 10 Ile Leu Leu Gly Ile Thr Asn Arg Trp Asp Met Arg Val Thr Leu Phe 25 Leu Ile Phe Leu Pro Ile Tyr Leu Val Ser Leu Leu Gly Asn Val Gly Met Val Leu Leu Ile Arg Ile Asp Ala Arg Leu His Thr Pro Met Tyr 55 Phe Phe Leu Ala Asn Leu Ser Leu Leu Asp Ala Phe Tyr Ser Ser Ala 70 75 Ile Gly Pro Lys Met Leu Val Asp Leu Leu Ser Arg Ala Thr Ile 90 Pro Tyr Val Ala Cys Ala Leu Gln Met Phe Val Phe Ala Gly Leu Ala 105 Asp Ala Glu Cys Cys Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val 115 120 125 Ala Ile Gly Asn Pro Leu Leu Tyr Thr Thr Val Met Ser Pro Arg Leu 135 140 Cys Leu Ala Leu Leu Gly Ala Ser Gly Leu Gly Gly Ala Val Ser Ala 150 155 Phe Val His Thr Thr Phe Thr Phe Arg Leu Ser Phe Cys Gly Ser Leu 165 170 175

Glu Val Asn Ser Phe Phé Cys Asp Ile Pro Pro Leu Leu Ala Ile Ser 185 Cys Asn Asp Thr Ser Leu Asn Glu Leu Leu Phe Ala Val Cys Gly 200 195 Phe Ile Gln Thr Thr Val Leu Ala Ile Ala Val Ser Tyr Gly Phe 215 Ile Ala Val Ala Val Ile Arg Met Gln Ser Ala Glu Gly Arg Arg Arg 230 Ala Ala Ser Thr Cys Gly Ser His Leu Thr Ala Val Ser Ile Leu Tyr 245 250 Gly Thr Leu Ile Phe Met Tyr Leu Arg Pro Ser Ser Ser Tyr Ala Leu 265 Asp Thr Asp Lys Met Ala Ser Val Phe Tyr Thr Leu Val Ile Pro Ala 280 Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala 295 Phe Gln Arg Thr Trp His Arg Phe Cys Cys Pro Gly Arg Ser Thr Arg 310 Asp Trp Pro Gln Glu Ala His

<210> 2060 <211> 318 <212> PRT

<213> Mus musculus

<400> 2060

Met Gly Gln Ser Asn Asn Val Thr Glu Phe Val Leu Leu Gly Phe Thr Gln Asp Pro Ala Gly Gln Lys Ala Leu Phe Val Met Phe Ser Leu Met 25 Tyr Ile Ala Thr Met Val Gly Asn Leu Leu Ile Val Gly Thr Val Ile 40 Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu 55 Ser Leu Met Asp Ala Val Tyr Ser Thr Ala Ile Ser Pro Lys Leu Ile 75 Val Asp Leu Leu Arg Glu Lys Lys Thr Ile Ser Phe Arg Ala Cys Ile 85 90 Ser Gln Leu Phe Ile Glu His Leu Phe Gly Gly Val Asp Ile Val Ile 105 Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Leu Ile Ile Met Asn Arg Arg Val Cys Ile Leu Phe Leu Val 135 140 Met Ala Trp Val Gly Gly Phe Val His Ser Leu Phe Gln Val Leu Ala 150 155 Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Gly 165 170 Cys Asp Ile Tyr Pro Leu Leu Leu Ala Cys Thr Asp Thr Tyr Phe 180 185 Leu Gly Leu Thr Ile Ile Ala Asn Gly Gly Ala Met Cys Ile Val Ile Phe Ile Leu Leu Leu Ser Tyr Ala Ile Ile Leu Arg Ser Leu Gln Asn His Ser Lys Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ile Ser 230 235 His Ile Thr Val Val Phe Leu Phe Phe Val Pro Cys Ile Phe Met Tyr

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245
                                    250
Val Arg Pro Val Ser Ser Phe Pro Ile Asp Lys Ser Ile Thr Val Ile
                                265
                                                    270
           260
Tyr Thr Ile Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
Asn Ser Glu Met Lys Asn Ser Met Glu Lys Leu Leu Gln Lys Met Leu
                       295
Ser Pro Asn Arg Ile Lys Leu Ser Ser Cys Cys Ser Tyr Asp
                    310
<210> 2061
<211> 321
<212> PRT
<213> Mus musculus
<400> 2061
Met Gly Asn His Thr Thr Val Asn Met Phe Leu Leu Trp Gly Phe Ser
                5
                                    10
Ser Phe Pro Glu Leu His Asn Leu Leu Phe Val Val Leu Leu Ser
            20
                                25
His Val Thr Ile Ile Leu Ala Asn Ala Phe Ile Met Val Ala Ile Lys
                            40
Leu Asn His Asn Leu His Ala Pro Met Tyr Phe Phe Leu Phe Ala Leu
                        55
Ser Phe Ser Glu Thr Cys Thr Thr Met Val Ile Leu Pro Arg Leu Leu
                    70
                                       75
Val Asp Leu Ile Ser Lys Asn Lys Ala Ile Ser Leu Pro Glu Cys Ala
                                    90
                                                        95
               8.5
Thr Gln Met Phe Phe Phe Gly Leu Gly Gly Asn Asn Cys Phe Ile
           100
                                105
                                                   110
Leu Ser Ala Met Ser Tyr Asp Arg Tyr Thr Ala Ile His Asn Pro Leu
                           120
        115
                                                125
His Tyr Pro Ile Leu Met Thr Gln Lys Ile Cys Leu His Leu Ile Val
   130
                       135
                                           140
Ala Ser Gly Val Leu Gly Phe Ser Ile Ser Leu Cys Ile Val Ile Thr
                   150
                                        155
Ile Phe Asn Leu Ser Phe Cys Asn Ser Asn Ile Ile Gln His Phe Phe
                                    170
               165
```

Cys Asp Ile Asp Pro Val Val Ser Leu Ala Cys Asn Leu Thr Phe Tyr His Lys Val Ile Leu Phe Ala Leu Thr Ala Phe Val Leu Val Gly Ser Phe Ile Phe Ile Met Val Ser Tyr Val Phe Ile Val Thr Val Val Ile Lys Met Pro Ser Ala Lys Gly Arg Tyr Lys Thr Phe Ser Thr Cys Ser Ser His Phe Thr Val Val Phe Ile His Tyr Gly Phe Ala Ser Phe Val Tyr Leu Arg Pro Lys Asn Ser Tyr Ser Phe Arg Asp Ala Thr Leu Leu Ala Val Thr Tyr Thr Ile Leu Thr Pro Leu Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Gly Ile Gln Thr Ala Leu Lys Lys Asp Ile Gly Asn Ile Ile Arg Phe Phe Ser Lys Met Val Asn Lys Lys Ala Gln Lys Ile

```
<210> 2062
<211> 325
<212> PRT
<213> Mus musculus
<400> 2062
Met Tyr Val Ala Asn Ser Ser Arg Met Asn Ala Phe Ile Leu Leu Gly
Leu Thr Asp Asn Pro Asp Leu Glu Ala Pro Leu Phe Ile Ile Phe Asn
Leu Ile Tyr Leu Ile Thr Leu Ile Gly Asn Leu Gly Met Ile Val Leu
        35
                            40
Ile Trp Phe Asp Ser His Leu His Thr Pro Met Tyr Ile Phe Leu Ser
                        55
His Leu Ser Leu Ala Asp Cys Val Tyr Ser Ser Ala Val Thr Pro Lys
                    70
                                         75
Val Met Val Gly Leu Leu Thr Gly Asp Lys Val Ile Ser Tyr Gly Gly
                                    90
                85
Cys Val Ala Gln Met Phe Phe Phe Val Thr Phe Ala Ser Val Asp Cys
            100
                                105
Phe Leu Leu Ala Val Met Ala Phe Asp Arg His Ala Ala Val Cys Lys
                            120
Pro Leu His Tyr Thr Thr Asn Met Thr Thr Ser Val Cys Ala Cys Met
                        135
Val Ile Ala Cys Tyr Val Phe Ser Leu Ala Glu Ser Ser Val Tyr Thr
                    150
                                        155
Gly Phe Ile Phe Asp Leu Ser Phe Cys His Ser Asn Val Ile His His
                165
                                    170
Phe Phe Cys Asp Ile Pro Pro Ile Leu Asn Leu Ser Cys Ser Asp Ile
            180
                                185
                                                     190
Tyr Thr Asn Glu Ile Val Leu Phe Ile Ile Thr Ser Phe Asn Val Phe
        195
                            200
Phe Ser Leu Ile Val Ile Leu Thr Ser Tyr Ala Phe Ile Phe Ile Ala
                        215
                                             220
Ile Leu Arg Met His Ser Ala Glu Gly Arg Lys Lys Ala Ser Ser Thr
                    230
                                         235
Cys Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Ile Ile
                245
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Ser His Ser Met Asp Asn Asp Gln
            260
                                265
Met Ala Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu Asn Pro Val
                            280
Val Tyr Ser Leu Arg Asn Lys Glu Val His Ser Ala Phe Lys Lys Ala
                        295
Ile Glu Lys Leu Lys Ser Ala Gln His Gln Val Leu Ile Arg Asp Leu
                    310
Tyr Ser Leu Cys Asn
                325
<210> 2063
<211> 321
<212> PRT
<213> Mus musculus
```

Met Glu Glu Asn Gln Thr Thr Val Thr Glu Phe Ile Leu Leu Gly Phe

<400> 2063

```
10
Cys Leu Gly Pro Arg Ile His Leu Val Leu Phe Leu Leu Phe Ser Leu
            2.0
Phe Tyr Thr Leu Thr Ile Leu Gly Asn Gly Thr Ile Leu Ala Met Ile
                            40
Cys Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His
Leu Ala Ile Val Asp Met Ala Tyr Ala Cys Asn Thr Val Pro Gln Thr
                    70
                                        75
Leu Ile Asn Leu Leu Asp Glu Thr Arg Pro Ile Thr Phe Ala Gly Cys
                                    90
Met Thr Gln Thr Tyr Leu Phe Leu Thr Phe Ala Ile Thr Glu Cys Leu
Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro
                            120
Leu His Tyr Thr Val Ile Met Asn Trp Arg Val Cys Thr Ile Met Ala
                        135
                                            140
Ala Val Ser Trp Ile Val Ser Phe Leu Leu Ser Leu Val His Leu Leu
                    150
                                        155
Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Ile Asn His Phe
                                    170
Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Thr
            180
                                185
                                                     190
Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Thr Leu Val Gly
        195
                            200
Pro Leu Cys Phe Val Leu Val Ser Tyr Thr Arg Ile Leu Val Ala Ile
                        215
                                            220
Leu Arg Ile Gln Ser Gly Glu Arg Arg Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val
                245
                                    250
Met Tyr Met Ala Pro Lys Ser Gln His Pro Glu Glu Gln Gln Lys Ile
                                265
Leu Phe Leu Phe Tyr Ser Phe Phe Asn Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Ala Glu Val Lys Gly Ala Leu Arg Arg Ala Leu
                        295
Cys Lys Glu Ser His Ser Cys Leu Val Trp Cys Ser His His Lys Pro
                                        315
Trp
```

<211> 321

<212> PRT

<213> Mus musculus

<400> 2064

 Met Glu Glu Asn Gln Thr Met Val Thr Glu Phe Val Leu Gly Phe 1
 5
 10
 15
 15

 Cys Leu Gly Pro Arg Ile His Leu 20
 Val Leu Phe Leu Leu Phe Ser Leu 25
 30

 Phe Tyr Thr Leu Thr Ile Leu Gly Asn Gly Thr Ile Leu Ala Met Ile 35
 40
 45

 Cys Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His 50
 55
 60

 Leu Ala Ile Val Asp Met Ala Tyr Ala Cys Asn Thr Val Pro Gln Thr 65
 70
 75

```
Leu Ile Asn Leu Leu Asp Glu Thr Arg Pro Ile Thr Phe Ala Gly Cys
                                    90
Met Thr Gln Thr Phe Leu Phe Leu Ala Phe Ala His Thr Glu Cys Val
                                105
            100
Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro
                            120
Leu His Tyr Thr Val Ile Met Asn Trp Arg Val Cys Thr Ile Leu Ala
                        135
                                            140
Ala Val Ser Trp Ile Phe Ser Phe Leu Leu Ala Leu Val His Leu Val
                    150
                                        155
Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Ile Asn His Phe
                                    170
Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Thr
            180
                                185
                                                    190
Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Ile Leu Val Ala
       195
                            200
Pro Leu Cys Phe Val Leu Val Ser Tyr Thr Arg Ile Leu Val Ala Ile
                        215
                                            220
Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val
                245
                                    250
Met Tyr Met Ala Pro Lys Ser Gln His Pro Glu Glu Gln Gln Lys Val
                                265
Leu Phe Leu Phe Tyr Ser Phe Phe Asn Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Ala Glu Val Lys Gly Ala Leu Lys Arg Ser Leu
                                           300
                        295
Cys Lys Glu Ser His Ser Trp Leu Val Trp Cys Ser Asp His Lys Ser
305
                    310
                                        315
Trp
```

```
<210> 2065
```

<400> 2065

| Met 1 | Ala | Thr | Lys | Asn 5 | Arg | Thr | Glu | Val | Thr 10 | Glu | Phe | Val | Leu | Leu 15 | Gly |
|-----------|------------|------------|------------|-----------|-----------|------------|------------|------------|-----------|-----------|------------|------------|------------|-----------|-----------|
| Leu | Ser | Ser | Gln 20 | Pro | Glu | Met | Gln | Pro 25 | Val | Ile | Phe | Gly | Val 30 | Val | Leu |
| Ile | Met | Tyr 35 | Leu | Met | Ala | Val | Leu 40 | Gly | Asn | Thr | Leu | Leu 45 | Val | Leu | Val |
| Ala | Cys 50 | Ser | Asp | Pro | Lys | Leu 55 | His | Thr | Pro | Met | Tyr 60 | Phe | Leu | Leu | Ser |
| Gln 65 | Leu | Ser | Leu | Ile | Asp 70 | Ile | Ser | Leu | Thr | Thr 75 | Ile | Ile | Val | Pro | Gln 80 |
| Met | Leu | Val | His | Thr 85 | Leu | Ser | Val | Asn | Arg 90 | Thr | Ile | Ser | Tyr | Asn 95 | Cys |
| Cys | Met | Thr | Gln 100 | Leu | Phe | Ser | Phe | Met 105 | Thr | Val | Gly | Ser | Met 110 | Glu | Val |
| His | Leu | Leu 115 | Gly | Ala | Met | Ala | Tyr 120 | Asp | Arg | Tyr | Val | Ala 125 | Ile | Cys | Asp |
| Pro | Leu 130 | Arg | Tyr | Ser | Ser | Ile 135 | Val | Ser | His | Ser | Leu 140 | Cys | Leu | Arg | Ile |
| Thr | Leu | Thr | Ser | Trp | Val | Val | Val | Ser | Leu | Asn | Ser | Leu | Leu | Tyr | Ser |

<211> 322

<212> PRT

<213> Mus musculus

```
145
                    150
                                        155
Val Leu Val Thr Arg Leu Thr Phe Cys Gly Asn Lys Val Thr His Phe
                                    170
                165
Phe Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Thr Arg Pro Val
                                185
                                                    190
           180
Val Asn Glu Met Leu Ile Phe Thr Glu Gly Val Ala Val Val Ser
                            200
Pro Ile Phe Phe Ile Phe Gly Ser Tyr Val Arg Ile Gly Ile Val Ile
                        215
Ala His Met His Ser Val Ala Ala Leu Gln Lys Ala Leu Ser Thr Cys
                    230
                                        235
Ser Ser His Val Leu Val Val Met Phe Leu Phe Gly Ser Leu Val His
                                    250
Met Tyr Leu Lys Pro Ser Ser Ser Tyr Asn Leu Glu Gln Asp Arg Gln
            260
                                265
Val Ala Ile Phe Tyr Thr Leu Ile Ser Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Gln Glu Val Lys Gly Ala Leu Trp Arg Leu Phe
Arg Lys Leu Tyr Leu Arg Gln Cys Pro Ala Trp Ile Ser His Asn Thr
305
                    310
                                        315
Cys Gln
```

<211> 326

<212> PRT

<213> Mus musculus

<400> 2066

Met Pro Leu Leu Phe Ser Arg Ala Ala Cys Ala Met Ser Met Arg 15 Asn His Thr Ser Val Thr Glu Phe Ile Leu Leu Gly Ile Ser Asn Thr 25 Glu Gly Leu Glu Ser Met Leu Phe Ala Leu Phe Leu Val Phe Tyr Val 40 Phe Ala Leu Leu Gly Asn Leu Leu Ile Phe Leu Thr Ile Leu Ala Ser Pro Asn Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu Ala Val 70 Phe Asp Ile Phe Phe Pro Ser Val Asn Ser Pro Lys Met Met Asp Tyr Leu Val Arg Gln Gly Arg Thr Ile Ser Tyr Gln Gly Cys Ala Ser Gln Ile Phe Phe Tyr His Thr Leu Gly Cys Thr Glu Cys Phe Leu Tyr Thr 120 Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Tyr Pro Met Arg Tyr 135 140 Thr Val Ile Met Asn Pro Arg Val Cys Thr Cys Phe Thr Val Gly Thr 150 155 Trp Leu Gly Gly Phe Val His Gly Ser Ile Leu Thr Phe Leu Ile Phe 165 170 Lys Leu Pro Tyr Cys Gly Pro Asn Glu Val Asp Ser Phe Phe Cys Asp 180 185 Ile Pro Val Val Leu Ser Leu Ala Cys Ala Asp Thr Ser Leu Ala Gln 200 205 Thr Val Ser Phe Thr Asn Val Gly Val Val Ala Leu Thr Cys Phe Leu 210 215 220

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      Leu
      Val
      Leu
      Thr
      Ser
      Tyr
      Thr
      Arg
      Ile
      Val
      Ile
      Ser
      Ile
      Leu
      Lys
      Ile
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<210> 2067 <211> 322 <212> PRT

<213> Mus musculus

<400> 2067

Met Glu Lys Ile Thr Ser Ala Val Asp Val His Asn Ile Pro Leu Lys 10 Asn Met Thr Glu Ala Thr Met Phe Ile Leu Leu Gly Phe Thr Asp Asp 25 Phe Glu Leu Gln Val Phe Leu Phe Leu Phe Leu Ala Ile Tyr Leu 40 Phe Thr Leu Val Gly Asn Phe Gly Leu Val Val Leu Val Ile Gly Asp 55 Cys Arg Leu His Asn Pro Met Tyr Tyr Phe Leu Ser Val Leu Ser Phe 70 75 Leu Asp Ala Cys Tyr Ser Thr Val Val Thr Pro Lys Met Leu Val Asn 85 90 Phe Leu Ser Glu Asn Lys Ser Ile Ser Phe Leu Ala Cys Ala Thr Gln 100 105 Met Leu Leu Phe Val Ser Leu Gly Thr Thr Glu Cys Phe Leu Leu Ala 120 125 Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Tyr Asn Pro Leu Leu Tyr 135 140 Thr Val Ala Met Ser Pro Arg Val Tyr Leu Pro Leu Ile Ile Ala Ser 150 155 Tyr Ala Gly Gly Val Val His Gly Ala Ile His Thr Val Ala Thr Phe 170 Ser Leu Ser Phe Cys Gly Ser Asn Glu Ile Lys His Val Phe Cys Asp 185 Ile Pro Ala Leu Leu Ala Leu Ser Cys Ser Asp Thr His Thr Asn Glu 200 Leu Leu Val Leu Tyr Leu Val Gly Leu Ile Glu Ile Val Thr Ile Leu 215 220 Ile Val Leu Val Ser Tyr Gly Phe Ile Leu Phe Ala Ile Leu Asn Met 230 235 His Ser Ala Glu Gly Arg Arg Lys Val Phe Ser Thr Cys Gly Ser His 250 Leu Thr Gly Val Ser Ile Tyr His Gly Thr Ile Leu Phe Thr Tyr Met 265 Arg Pro Ser Ser Ser Tyr Ala Ser Asn His Asp Met Val Val Ser Ile 280 Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu

Arg Asn Lys Asp Val Lys Val Ala Phe Asn Lys Leu Trp Arg Lys Cys 305 310 315 Asp Ser <210> 2068 <211> 330 <212> PRT <213> Mus musculus <400> 2068 Met Ser Ile His Ser Pro Gly Tyr Thr Val Arg Arg Ile Pro Val Asn 5 Asn Val Thr Asp Thr Thr Met Phe Ile Leu Thr Gly Phe Thr Asp Asp 20 Ala Asp Leu Gln Val Leu Leu Phe Leu Leu Phe Phe Val Ile Tyr Leu 45 Phe Thr Leu Ile Gly Asn Leu Gly Leu Val Leu Val Ile Gly Asp Ser Arg Leu His Asn Pro Met Tyr Tyr Phe Leu Ser Val Leu Ser Phe 70 75 Leu Asp Ala Cys Tyr Ser Thr Val Val Thr Pro Lys Met Leu Val Asn 85 Phe Ile Ser Asn Asp Lys Ser Ile Ser Tyr Pro Gly Cys Val Thr Glu 105 110 Met Phe Leu Phe Val Thr Phe Gly Thr Thr Glu Cys Phe Leu Leu Ala 120 125 Ala Met Ala Tyr Asp Arg Phe Val Ala Ile Tyr Asn Pro Leu Leu Tyr 135 140 Ala Val Lys Met Ser Pro Arg Val Tyr Ile Pro Leu Ile Ile Ala Cys 150 155 Tyr Ser Gly Gly Ile Met His Ala Thr Ile His Thr Val Ala Thr Phe 170 Ser Leu Ser Phe Cys Ala Ser Asn Glu Ile Arg His Val Phe Cys Asp 185 Ile Pro Pro Leu Leu Ala Ile Ser Cys Ser Asn Thr Asn Ile Asn Gln 200 205 Leu Leu Phe Tyr Cys Val Gly Ser Ile Glu Ile Ile Thr Ile Leu 220 Ile Val Leu Val Ser Tyr Ser Phe Ile Leu Phe Ala Ile Leu Lys Met 230 235 Asn Ser Ala Glu Gly Arg Arg Lys Ile Phe Ser Thr Cys Gly Ser His 250 Leu Thr Gly Val Ser Ile Tyr His Gly Thr Ile Leu Phe Met Tyr Val 265 Arg Pro Ser Ser Asn Tyr Ala Leu Glu His Asp Met Ile Val Ser Thr 280 Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu 290 295 Arg Asn Lys Asp Val Lys Glu Ala Met Lys Lys Ile Phe Glu Arg Asn 310 315 Phe Phe Met Asn Lys Val His Phe Lys Leu 325

295

300

```
<212> PRT
<213> Mus musculus
```

<400> 2070

Met Glu Arg Leu Asn His Ser Arg Val Pro Glu Phe Val Leu Leu Gly 10 Leu Thr Asp Ser Pro Glu Leu Gln Ile Phe Phe Phe Val Ala Phe Ser Ile Phe Tyr Leu Met Thr Met Leu Gly Asn Cys Leu Ile Leu Phe Thr

```
40
Val Leu Ser Thr Ser His Leu His Ser Pro Met Phe Phe Leu Leu Ser
Asn Leu Ser Leu Ile Asp Ile Cys Leu Ser Ser Phe Ala Thr Pro Lys
                    70
                                        75
Met Ile Met Asp Phe Phe Ala His His Lys Thr Ile Ser Phe Glu Gly
               85
                                    90
Cys Ile Ser Gln Ile Phe Leu Leu His Leu Phe Thr Gly Thr Glu Ile
                                105
                                                    110
            100
Val Leu Leu Ile Ser Met Ser Phe Asp Arg Tyr Ile Ala Ile Cys Lys
                            120
                                                125
Pro Leu Tyr Tyr Ser Thr Ile Met Ser Gln Lys Val Cys Val Gly Leu
                        135
                                            140
Val Ile Ala Ser Trp Met Val Gly Phe Leu His Thr Met Ser Gln Leu
                   150
                                        155
Val Phe Ile Leu Tyr Leu Pro Phe Cys Gly Pro Asn Val Val Asp Ser
                165
                                    170
                                                        175
Phe Phe Cys Asp Leu Pro Leu Val Ile Gln Leu Ala Cys Ile Asp Thr
           180
                                185
                                                    190
Tyr Val Leu Gly Val Phe Met Val Ala Thr Ser Gly Val Ile Ala Leu
                            200
                                                205
        195
Ile Ser Phe Leu Leu Leu Ile Ser Tyr Ile Val Val Leu Val Thr
                        215
                                            220
Ile Arg Gly His Ser Ser Ile Gly Ser Ser Lys Ala Leu Ser Thr Cys
                    230
                                        235
Thr Ser His Phe Thr Val Val Leu Met Phe Phe Gly Pro Cys Ile Leu
                245
                                    250
Ile Tyr Val Trp Pro Phe Thr Asn Phe Leu Met Asp Lys Ile Leu Ser
           260
                                265
                                                    270
Val Phe Tyr Thr Ile Phe Thr Pro Phe Leu Asn Pro Leu Ile Tyr Thr
        275
                            280
Leu Arg Asn Gln Glu Val Arg Thr Ala Val Lys Lys Ile Ser Asn
                        295
                                           300
Gln Tyr Phe Ser Phe Gly Lys Ile Asn Pro His Tyr Thr Val Lys Gly
                    310
                                        315
Leu Glu Arg Ser Arg Glu
```

<211> 317

<212> PRT

<213> Mus musculus

<400> 2071

Met Asn Gln Ser Val Val Ser Glu Phe Val Phe Leu Gly Leu Thr Asn Ser Trp Asn Ile Gln Leu Phe Leu Phe Val Phe Ser Ser Ile Phe Tyr Val Ala Ser Met Met Gly Asn Ser Leu Ile Val Phe Thr Val Val Ser Asp Ser His Leu His Ser Pro Met Tyr Phe Leu Leu Ala Asn Leu Ser Phe Ile Asp Leu Gly Ile Ser Ser Val Thr Ser Pro Lys Met Ile Cys Asp Leu Phe Arg Lys His Lys Val Ile Ser Phe Arg Gly Cys Val Thr Gln Ile Phe Phe Ile His Val Ile Gly Gly Val Glu Met Val Leu Leu

```
Ile Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His
                            120
Tyr Leu Thr Ile Met Ser Pro Arg Val Cys Ile Leu Phe Ser Val Ala
                        135
Ser Trp Val Val Gly Phe Met His Ser Leu Val Gln Leu Ala Phe Val
                    150
Val Asn Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Ser Phe Tyr Cys
                                    170
Asp Phe Pro Arg Phe Ile Lys Leu Ala Cys Thr Asp Thr Tyr Lys Leu
                                185
Glu Leu Leu Val Ser Ile Asn Ser Gly Phe Met Ser Val Gly Ser Phe
                            200
Phe Ile Leu Ile Ile Ser Tyr Ile Val Ile Ile Phe Thr Val Gln Lys
                        215
His Ser Ser Ser Gly Ser Ser Lys Ala Leu Ser Thr Leu Ser Ala His
                    230
                                        235
Val Thr Val Val Val Leu Phe Phe Gly Pro Val Met Phe Phe Tyr Thr
                                    250
Trp Pro Ser Ser Tyr Thr His Leu Asp Lys Phe Leu Ala Ile Phe Asp
                                265
Ala Ile Val Thr Pro Phe Leu Asn Pro Val Ile Tyr Thr Leu Arg Asn
                            280
Gln Glu Met Lys Ile Ala Met Met Arg Val Phe Ser Lys Leu Met Gly
                        295
Cys Arg Gln Ile Phe Lys His Leu Asn Phe Glu Gln Thr
                    310
```

<211> 302

<212> PRT

<213> Mus musculus

<400> 2072

Met Asp His Leu Pro Val Phe Ile Leu Thr Gly Ile Pro Gly Met Pro Asp Lys Ser Leu Trp Met Val Phe Pro Leu Gly Phe Leu Tyr Thr Leu Thr Leu Leu Gly Asn Gly Thr Ile Leu Ala Val Val Glu Val Glu Gln Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Cys Met Leu Ala Leu Ile 55 Asp Ile Ser Leu Ser Met Ser Thr Leu Pro Ser Met Pro Pro Glu Ile 70 75 Pro Phe Glu Ala Cys Val Ala Gln Met Phe Phe Ile His Val Phe Gly 8.5 90 Leu Val Asp Ser Gly Val Leu Leu Ser Ile Ile Ala Phe Asp Arg Phe 100 105 Val Ala Ile Gln Asn Pro Leu His Tyr Ala Phe Ile Leu Thr His Gly 115 120 Val Ile Gly Lys Ile Gly Leu Val Val Leu Asp Arq Ala Val Cys Val 135 140 Val Phe Pro Val Pro Phe Leu Ile Lys Arg Leu Arg Phe Cys His Pro 150 155 Asn Ile Leu Ser His Ser Tyr Cys Leu His Gln Asp Met Met Arg Leu 165 170 175 Ala Cys Ala Ser Thr Arg Val Asn Ser Leu Tyr Gly Leu Ile Ile Val 185 Ile Leu Ile Leu Gly Leu Asp Ala Leu Ile Ile Leu Phe Ser Tyr Ile

```
200
        195
Leu Ile Leu Lys Thr Val Leu Gly Ile Ser Ser Arg Ala Glu Arg Leu
                        215
Lys Ala Leu Asn Thr Cys Leu Ser His Ile Cys Thr Val Leu Leu Phe
                    230
                                        235
Tyr Ile Pro Phe Ile Gly Ala Thr Met Ile His Arg Phe Gly Lys His
                245
                                    250
Leu Ser Pro Ile Val His Met Pro Met Ala Asn Ile Tyr Leu Leu Leu
                                265
            260
Pro Thr Leu Leu Asn Pro Ile Val Tyr Ser Val Lys Asn Lys Gln Ile
                            280
Arg Gly Val Met Lys Met Phe Gln Gly Arg Lys Ser Arg Ala
                        295
<210> 2073
<211> 314
<212> PRT
<213> Mus musculus
<400> 2073
Met Gly Thr Val Asn His Thr Asp Ile Ser His Thr Val Phe His Leu
                                    10
Leu Gly Ile Pro Gly Leu Glu Asp Gln His Met Trp Ile Ser Ile Pro
                                25
Phe Phe Ile Ser Tyr Ile Thr Ala Leu Leu Gly Asn Ser Leu Leu Ile
Phe Ile Ile Leu Thr Arg Pro Ser Leu His Glu Pro Met Tyr Leu Phe
Leu Cys Met Leu Ala Gly Ala Asp Ile Val Leu Ser Thr Ser Thr Val
                    70
Pro Gln Ala Leu Ser Ile Phe Trp Phe His Ala Gly Glu Ile Ser Leu
                                    90
Asp Arg Cys Ile Thr Gln Leu Phe Phe Ile His Ser Thr Phe Ile Ser
                                105
                                                     110
Glu Ser Gly Ile Leu Leu Val Met Ala Phe Asp Arg Tyr Ile Ala Ile
                            120
                                                125
Cys Tyr Pro Leu Arg Tyr Ile Thr Val Leu Thr Lys Ser Leu Ile Gly
                        135
                                            140
Lys Ile Gly Val Gly Ile Phe Leu Arg Ser Tyr Gly Thr Ile Phe Pro
                    150
                                        155
Ile Ile Phe Leu Leu Lys Arg Leu Thr Phe Cys Arg Thr Asn Ile Leu
                                    170
Pro His Thr Ala Cys Glu His Ala Gly Leu Ser Lys Tyr Ala Cys Asn
                                185
Asp Leu Gln Val His Ile Trp Tyr Gly Phe Phe Val Leu Met Ser Thr
                            200
Val Asn Leu Asp Val Val Leu Ile Phe Val Ser Tyr Val Leu Ile Leu
                        215
Arg Ala Val Phe His Met Pro Ser Gln Asp Ala Arg His Lys Ala Leu
                    230
                                        235
```

Asn Thr Cys Gly Ser His Val Cys Val Ile Ile Leu Phe Tyr Gly Pro

Gly Ile Phe Ser Thr Leu Asn His Gln Phe Gly Tyr Lys Ile Ser Thr

Gly Val His Val Leu Leu Ala Asn Val Cys Ile Leu Ala Pro Pro Met 275 280 285 Leu Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys Gln Ile Arg Asp Gln

295

265

250

255

270

300

245

260

```
Val Thr His Val Leu Phe Leu Lys Val Ile
305
                    310
<210> 2074
<211> 311
<212> PRT
<213> Mus musculus
<400> 2074
Met Arg Gly Glu Asn Ile Thr Lys Val Ser Thr Phe Ile Leu Leu Gly
                                    10
Phe Pro Thr Ala Pro Glu Leu Gln Tyr Leu Leu Phe Leu Leu Phe Leu
            20
                                25
Leu Ala Tyr Leu Phe Val Leu Val Glu Asn Leu Thr Ile Ile Leu Thr
        35
                            40
                                                45
Val Trp Ser Ser Ala Ser Leu His Arg Pro Met Tyr Tyr Phe Leu Gly
                                            60
                        55
Ser Leu Ser Phe Leu Glu Ile Trp Tyr Val Ser Asp Ile Ile Pro Lys
                                        75
                    70
Met Leu Asp Gly Phe Leu Leu Gln Arg Lys Arg Ile Ser Phe Thr Gly
                85
                                    90
Cys Met Thr Gln Leu Tyr Phe Phe Ile Ser Leu Val Cys Thr Glu Cys
                                105
            100
Val Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
        115
Pro Leu Arg Tyr Gln Val Ile Met Thr Thr Gly Leu Cys Val Gln Leu
                        135
                                            140
Val Ala Phe Ser Phe Ala Ser Ala Phe Thr Val Ser Val Ile Lys Val
                    150
                                        155
Tyr Phe Ile Ser Ser Ala Thr Phe Cys Gly Ser Asn Val Leu Asn His
                                    170
                165
Phe Phe Cys Asp Ile Ser Pro Ile Leu Lys Leu Ala Cys Thr Asp Phe
            180
                                185
Ser Thr Ala Glu Leu Val Asp Phe Ile Leu Ala Phe Ile Ile Leu Val
        195
                            200
                                                205
Phe Pro Leu Ala Thr Ile Leu Ser Tyr Gly Tyr Ile Thr Leu Ala
                                            220
                        215
Val Leu Arg Ile Pro Ser Ala Thr Gly Arg Trp Arg Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Val Val Thr Phe Phe Tyr Val Ala Met Leu
                245
                                    250
Phe Ile Tyr Val Arg Pro Gln Ala Ile Asp Thr Arg Ser Ser Asn Lys
                                265
Leu Ile Ser Ala Val Tyr Thr Val Leu Thr Pro Ile Leu Asn Pro Leu
                            280
                                                285
Ile Tyr Cys Leu Arg Asn Lys Glu Phe Lys Asp Ala Val Lys Arg Thr
                        295
Leu Gly Leu Gly His Thr Leu
305
<210> 2075
<211> 318
<212> PRT
<213> Mus musculus
```

Met Glu Glu Gly Asn Gln Thr Gly Met Val Leu Phe His Phe Arg Pro

<400> 2075

```
10
Phe Ser Lys Leu Pro Glu Val Gln Met Leu Ile Phe Val Leu Phe Leu
Met Met Tyr Leu Val Ser Ile Gly Gly Asn Met Ser Ile Val Leu Thr
                            40
Ile Trp Thr Asn Arg Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
Asn Leu Ala Ser Leu Glu Ile Phe Tyr Ser Ser Thr Ile Ala Pro Leu
                                        75
Thr Leu Ala Ser Ile Leu Ser Thr Glu Arg Thr Val Val Ser Leu Ala
                                    90
Gly Cys Gly Ala Gln Met Phe Phe Phe Ile Phe Leu Gly Ser Ala Asp
            100
                                105
Cys Ile Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
                            120
       115
His Pro Leu Arg Tyr Thr Leu Ile Met Ser Trp His Leu Cys Val Gln
    130
                        135
Leu Ala Leu Gly Ser Leu Leu Gly Phe Ile Leu Ala Met Gln Leu
                    150
                                        155
Thr Val Leu Ile Phe Gln Leu Pro Phe Cys Ser Ser Lys Glu Ile Ser
                                    170
                165
Leu Phe Tyr Cys Asp Val Leu Pro Val Met Arg Leu Ala Cys Ala Asp
            180
                                185
Thr His Val His Glu Ala Thr Leu Phe Val Val Ser Val Ile Val Leu
        195
                            200
Thr Ile Pro Phe Leu Leu Ile Thr Leu Ser Tyr Val Phe Ile Val Asp
                        215
Ala Ile Leu Lys Ile Arg Ser Ala Glu Gly Arg His Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ser Ser His Leu Thr Val Val Leu Leu Gln Tyr Gly Cys Thr
                                    250
                245
Ser Leu Ile Tyr Leu Cys Pro Ser Ser Ser Tyr Ser Pro Glu Arg Gly
                                265
            260
Gln Val Val Ser Val Val Tyr Thr Phe Ile Thr Pro Val Leu Asn Pro
        275
                            280
Leu Ile Tyr Ser Met Arg Asn Arg Glu Leu Lys Asp Ala Leu Arg Arg
                        295
Val Ile Met Lys Leu Val Leu Ile Gln Thr Gln Glu Ala Leu
                    310
<210> 2076
<211> 314
<212> PRT
<213> Mus musculus
<400> 2076
Met Thr Glu Glu Asn Gln Thr Val Val Thr Gln Phe Ile Leu Leu Gly
Leu Pro Ile Pro Pro Glu His Gln His Leu Phe Tyr Ala Leu Phe Leu
Ser Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
                            40
Ile His Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                                            60
```

Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys

Leu Leu Gln Asp Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly

75

90

70

```
Cys Leu Ala Gln Leu Tyr Phe Tyr Leu Tyr Phe Ala Asp Leu Glu Ser
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
Pro Leu His Tyr Met Ser Ile Met Ser Pro Arg Leu Cys Val Ser Leu
                        135
Val Leu Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                                        155
Leu Leu Val Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
                                    170
                165
Phe Phe Cys Asp Ile Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
                                185
His Ile Asn Glu Leu Val Ile Phe Val Met Gly Gly Leu Val Ile Val
Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Ala Arg Val Val Thr Ser
                        215
Ile Leu Lys Val Pro Ser Val Arg Gly Ile Arg Gln Val Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                                    250
Gly Leu Tyr Leu Cys Pro Thr Ala Asn Asn Thr Thr Val Lys Glu Thr
                                                    270
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Ala Arg Val
                        295
Leu Cys Lys Lys Ile Thr Phe Cys Leu
                    310
```

<210> 2077 <211> 272

<212> PRT

<213> Mus musculus

<400> 2077

Met Ala Phe Glu Asn Ala Ser Met Val Ile Glu Phe Ile Leu Leu Gly Ile Thr Asp Gln Pro Asp Leu Lys Ile Pro Phe Phe Leu Leu Phe Phe Val Gly Tyr Met Ile Thr Val Leu Gly Asn Leu Thr Leu Ile Ile Leu Ile Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Leu Leu Phe Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys 70 75 Met Leu Met Ser Phe Ile Gln Lys Lys Asn Ile Ile Ser Tyr Thr Gly Cys Met Ile Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys 105 Tyr Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Asn Val Thr Leu Ser Ser Lys Val Cys Cys Tyr Leu 140 Met Leu Gly Ser Tyr Phe Met Gly Phe Ser Gly Ala Met Ile His Thr 150 155 Gly Cys Ile Leu Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His 170 Tyr Phe Cys Asp Leu Leu Pro Leu Leu Gln Ile Ser Cys Thr Ser Thr

```
185
Tyr Ile Asn Glu Ile Glu Leu Phe Ile Val Ala Gly Lys Asp Ile Ile
                            200
                                                205
        195
Val Pro Thr Ile Ile Ile Phe Ile Ser Tyr Gly Phe Ile Leu Phe Ser
                        215
Val Leu Lys Ile Lys Ser Thr Glu Ser Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Met Leu Ala Val Ser Leu Phe Phe Gly Ser Gly Ala
                245
                                    250
Phe Met Tyr Leu Ile Pro Ser Asn Trp Asn Glu Ile Glu Thr Tyr Phe
<210> 2078
<211> 315
<212> PRT
<213> Mus musculus
<400> 2078
Glu Lys Gln Gln Asp Asn Gly Thr Trp Leu Val Thr Glu Phe Leu Leu
                                    10
Val Gly Phe Ser Asn Leu Pro Glu Leu Arg Pro Thr Leu Phe Ile Leu
            20
                                25
Phe Leu Leu Thr Tyr Leu Val Thr Leu Ser Gly Asn Ala Thr Ile Ile
                            40
Thr Ile Ile Gln Val Asp Arg Thr Leu His Thr Pro Met Tyr Arg Phe
                        55
Leu Ala Val Leu Ser Leu Ser Glu Thr Cys Tyr Thr Leu Val Thr Ile
                    70
                                        75
Pro Asn Met Leu Ala His Leu Leu Met Glu Ser Gln Ala Ile Ser Ile
                                    90
                85
Ala Gly Cys Arg Ala Gln Met Phe Phe Leu Gly Leu Gly Cys Ser
           100
                                105
                                                    110
His Cys Phe Leu Leu Thr Leu Met Gly Tyr Asp Arg Tyr Val Ala Ile
        115
                            120
                                                125
Cys His Pro Leu Arg Tyr Ser Val Ile Met Arg Pro Thr Val Cys Leu
                        135
                                            140
Cys Leu Gly Ala Leu Val Phe Cys Ser Gly Phe Ser Val Ala Leu Ile
                    150
                                        155
Glu Thr Cys Met Ile Phe Ser Ser Pro Phe Cys Gly Ala Gly His Val
                165
                                    170
Glu His Phe Phe Cys Asp Ile Ala Pro Val Leu Lys Leu Ser Cys Asp
            180
                                185
                                                    190
Glu Ser Ser Leu Lys Gly Leu Gly Ile Phe Phe Leu Ser Ile Leu Val
        195
                            200
                                                205
Val Leu Val Ser Phe Leu Phe Ile Leu Leu Ser Tyr Ala Phe Ile Val
                        215
                                            220
Ala Ala Ile Val Arg Ile Pro Ser Ala Ser Gly Arg Arg Lys Ala Phe
                    230
                                        235
Ser Thr Cys Ala Ala His Leu Thr Val Val Ile Val His Phe Gly Cys
                                    250
Ala Ser Ile Ile Tyr Leu Arg Pro Asp Ser Gly Ala Asn Pro Ser Gln
                                265
Asp Arg Leu Val Ala Val Phe Tyr Thr Val Val Thr Pro Leu Leu Asn
                            280
Pro Val Val Tyr Thr Leu Arg Asn Lys Glu Val Arg Val Ala Leu Arg
                                            300
                        295
Lys Asn Leu Ala Arg Gly Cys Gly Ala Phe Lys
                    310
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```
<210> 2079
<211> 309
<212> PRT
<213> Mus musculus
<400> 2079
Ile Lys Asn Gln Thr Leu Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp
Ala Pro Glu Leu Gln Val Cys Val Phe Leu Phe Leu Leu Thr Tyr
                                25
Ile Leu Ser Val Leu Gly Asn Leu Thr Ile Ile Val Leu Thr Leu Leu
                            40
Asp Ser His Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe Ser
                        55
Phe Leu Glu Ile Ser Phe Thr Ser Thr Phe Thr Pro Arg Val Leu Phe
                                        75
Ser Ile Ser Thr Gly Ile Lys Thr Ile Ser Phe Ala Gly Cys Phe Thr
                85
                                    90
Gln Tyr Phe Phe Ala Ile Leu Phe Gly Ala Thr Glu Phe Tyr Leu Leu
            100
                                105
                                                    110
Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His
                            120
                                                125
Tyr Thr Thr Ile Met Ser Asn Arg Val Cys Thr Leu Leu Val Leu Cys
                        135
                                            140
Ser Trp Met Ser Gly Phe Leu Ile Ile Leu Phe Pro Ile Ile Leu Thr
                    150
                                        155
Ser Gln Leu Asp Phe Cys Ala Ser Asn Val Leu Asn His Tyr Tyr Cys
                165
                                    170
                                                        175
Asp Tyr Gly Pro Leu Ile Glu Ile Ala Cys Ser Asp Thr Arg Leu Leu
            180
                                185
                                                    190
Glu Leu Phe Asp Phe Val Leu Ala Val Val Thr Leu Ile Val Thr Leu
        195
                            200
                                                205
Val Leu Val Ile Phe Ser Tyr Thr Arg Ile Ile Arg Thr Ile Leu Lys
                        215
                                            220
Ile Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
                    230
                                        235
His Met Val Val Ile Ser Leu Ser Tyr Gly Ser Cys Ile Phe Met Tyr
                245
                                    250
Ile Lys Pro Ser Ala Thr Glu Gly Val Ala Phe Asn Lys Gly Val Ala
            260
                                265
                                                    270
Val Leu Asn Asn Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr Thr
                            280
                                                285
Leu Arg Asn Lys Gln Val Lys Gln Ser Phe Lys Asp Ile Thr Arg Lys
   290
                        295
Ile Val Asn Leu Gln
305
<210> 2080
<211> 312
<212> PRT
<213> Mus musculus
<400> 2080
Glu Thr Ile Ala Asn Ser Thr Leu Val Thr Glu Phe Phe Leu Glu Val
Phe Ala Glu Ile Trp Glu Leu Arg Ile Leu Ile Thr Val Leu Phe Leu
```

```
Leu Val Tyr Leu Cys Ser Leu Leu Gly Asn Leu Thr Ile Ile Ile Val
                            40
Thr Thr Val Asp Gln Thr Leu Asn Thr Pro Met Tyr Phe Phe Leu Arg
                        55
                                             60
Asn Leu Ser Ile Leu Asp Met Gly Tyr Ile Ser Ile Thr Val Pro Ser
                    70
Thr Cys Ile Asn Ser Leu Thr Asn His Arg Asn Ile Ser Val Ala Gly
                                    90
Cys Ala Ala Gln Ile Phe Ser Phe Leu Phe Cys Ala Tyr Val Glu Ile
                                 105
Leu Phe Leu Ser Ile Met Ala Gln Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu Leu Tyr Pro Val Ile Met Asn His Gln Phe Cys Val Gln Met
                        135
Thr Leu Ala Ser Leu Leu Ser Ser Leu Val Ile Ala Ser Val His Thr
                    150
                                         155
Phe Lys Thr Phe Gln Leu Ser Phe Cys His Ser Asn Val Val Pro Gln
                                    170
Phe Phe Cys Asp Leu Pro Ala Leu Leu Arg Leu Ser Cys Ser Asp Thr
            180
Phe Ser Asn Lys Leu Leu Ile Leu Leu Thr Val Ile Gly Val Ser Gly
                            200
Ser Cys Phe Val Phe Ile Ala Ile Ser Tyr Ile His Ile Leu Ser Thr
    210
                        215
Val Leu Lys Ile Pro Val Lys Gly Glu Arg Gly Lys Ala Phe Ser Thr
                    230
                                        235
Cys Val Pro His Ile Ile Val Val Ser Val Phe Val Ser Ser Ala Ala
                                    250
Phe Val Tyr Leu Arg Pro Pro Val Ile Thr Phe Glu Val Val Gln Glu
                                265
Met Val Ile Ser Val Phe Tyr Thr Met Val Pro Pro Phe Leu Asn Pro
                            280
Ile Val Tyr Ser Leu Arg Asn Lys Gln Ile Lys Glu Ala Val Arg Lys
                        295
Val Ile Leu Arg Val Phe Pro Ile
                    310
<210> 2081
<211> 319
```

<212> PRT <213> Mus musculus

<400> 2081

Met Glu Ile Asn Asn Gln Thr Ser Phe Pro Val Ser Ser Phe Ile Leu Leu Gly Leu Ser Ala His Pro Lys Leu Glu Lys Thr Phe Phe Met Leu 20 Ile Leu Leu Met Tyr Leu Val Ile Leu Leu Gly Asn Gly Ile Leu Ile 40 Leu Val Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe 55 Leu Gly Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Val 70 75 Pro Leu Ile Leu Asp Ser Phe Leu Thr Pro Arg Lys Thr Ile Ser Phe 85 90 Ser Gly Cys Ala Val Gln Met Phe Leu Ser Phe Ala Met Gly Ala Thr 105 100 110

```
Glu Cys Val Leu Leu Ser Met Met Ala Phe Asp Arg Tyr Val Ala Ile
                            120
Cys Asn Pro Leu Arg Tyr Pro Val Val Met Asn Lys Ala Ala Tyr Val
                        135
   130
Pro Met Ala Val Ser Ser Trp Ser Gly Gly Ile Ala Val Ser Val Val
                    150
                                        155
Gln Thr Ser Leu Ala Met Lys Leu Thr Phe Cys Gly Asp Asn Val Ile
                165
                                    170
Asn His Phe Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala
           180
                                185
Asp Ile Ser Ile Asn Val Ile Ser Met Gly Val Thr Asn Ile Ile Phe
                            200
       195
                                                205
Leu Gly Val Pro Val Leu Phe Ile Ser Phe Ser Tyr Val Phe Ile Leu
    210
                       215
                                            220
Val Thr Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe
                    230
                                        235
Ser Thr Cys Ser Ala His Leu Thr Val Val Leu Val Phe Tyr Gly Thr
                                    250
                245
Ile Leu Phe Met Tyr Gly Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala
                                265
           260
Asp Lys Gln Asp Leu Ala Asp Leu Ile Ser Leu Phe Tyr Gly Val Leu
                            280
                                                285
Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val
                       295
                                            300
Arg Ala Ala Val Thr Asn Leu Val Val Leu Lys Lys Ser Phe Thr
                    310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 2082

Met Asn His Glu Glu Leu Glu Ser Ile Asn Asn Val Ser Thr Val Ile 10 Gln Phe Val Leu Ile Gly Phe Ser Asp Leu Pro Asn Leu Gln Gly Phe 20 25 Leu Phe Ala Val Phe Ser Val Val Tyr Ile Ile Ile Leu Ile Gly Asn 40 Phe Leu Ile Ile Ile Ile Ser Thr Asp Gln Ala Leu Gln Lys Pro 55 60 Met Tyr Phe Phe Leu Ala Asn Phe Ser Ser Leu Glu Ile Cys Tyr Val 70 7.5 Ser Val Thr Val Pro Arg Ile Leu Phe Asn Ile Gly Thr Gln Asn Arg 8.5 90 Ser Ile Ser Leu Met Ser Cys Ala Thr Gln Leu Cys Phe Phe Leu Val 100 105 Phe Gly Thr Thr Glu Cys Leu Leu Leu Ala Val Met Ser Tyr Asp Arg 115 120 125 Tyr Val Ala Ile Cys Asn Pro Leu His Tyr Pro Leu Val Met Asn Pro 130 135 140 Thr Lys Cys Thr Gln Leu Ala Ala Val Ser Trp Leu Gly Gly Ile Pro 155 150 Val Gln Ile Gly Gln Thr Cys Gln Ile Phe Ser Met Asn Phe Cys Asn 170 165 175 Ser Tyr Lys Ile Asn His Phe Phe Cys Asp Ile Pro Pro Ile Leu Thr 185 Leu Ala Cys Gly Asn Thr Ser Val His Glu Leu Ser Val Tyr Val Val

```
200
                                                205
       195
Val Met Val Val Ala Ala Phe Pro Phe Ile Leu Val Leu Thr Ser Tyr
                                            220
                        215
Ser Lys Ile Ile Ala Thr Ile Leu Arg Leu Pro Thr Ala Lys Gly Arg
                    230
                                        235
                                                             240
Gly Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Val Val Leu Leu
                245
                                    250
Phe Tyr Gly Ser Ala Thr Val Thr Tyr Leu Arg Pro Lys Ser Met His
                                265
                                                     270
Ser Pro Gly Thr Asp Lys Leu Leu Ser Leu Phe Tyr Thr Ile Val Thr
        275
                            280
Pro Met Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile
                        295
                                             300
Ala Ala Leu Arg Lys Leu Ile Leu Lys Lys
                    310
<210> 2083
<211> 310
<212> PRT
<213> Mus musculus
<400> 2083
Gln Ala Asn His Ser Ser Ala Glu Arg Phe Leu Leu Gly Phe Ser
                                    10
Asp Trp Pro Ser Leu Gln Pro Val Leu Phe Ala Leu Val Leu Leu Cys
                                25
Tyr Leu Leu Thr Leu Thr Gly Asn Ala Ala Leu Val Leu Leu Ala Ile
Arg Asp Pro Arg Leu His Thr Pro Met Tyr Tyr Phe Leu Cys His Leu
Ala Leu Val Asp Val Gly Phe Thr Thr Ser Val Val Pro Pro Leu Leu
                    70
                                        75
Ala Ser Leu Arg Gly Ser Met Leu Gln Leu Pro Arg Ala Gly Cys Met
                85
                                    90
Ala Gln Leu Cys Ser Ser Leu Ala Leu Gly Ser Ala Glu Cys Val Leu
           100
                                105
                                                    110
Leu Ala Val Met Ala Leu Asp Arg Ala Ala Ala Val Cys Asn Pro Leu
                            120
                                                125
Arg Tyr Thr Ser Leu Ala Ser Pro Leu Leu Cys Arg Thr Leu Ala Arg
                        135
                                            140
Ile Ser Trp Leu Gly Gly Leu Ala Asn Ser Ala Ala Gln Thr Ala Leu
                    150
                                        155
Leu Ala Ala Arg Pro Leu Cys Ala Pro Arg Cys Leu Asp His Phe Ile
                165
                                    170
                                                         175
Cys Glu Leu Pro Ala Leu Leu Gln Leu Ala Cys Arg Gly Gly Arg Ser
            180
                                185
                                                    190
Ala Thr Glu Arg Gln Met Phe Ala Ala Arg Val Val Ile Leu Leu Val
                            200
Pro Ser Ala Val Ile Leu Ala Ser Tyr Ile Ala Val Gly Arg Ala Val
                        215
Trp Gly Met His Ser Ser Ser Gly Trp Arg Lys Ala Ala Ser Thr Cys
                    230
Gly Ser His Leu Thr Ala Val Cys Leu Phe Tyr Gly Ser Ala Thr Tyr
                                    250
Thr Tyr Leu Gln Pro Thr His Ser Tyr Asn Gln Gly Arg Gly Lys Phe
                                                     270
Val Ser Leu Phe Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu Ile
```

```
Arg Ser Leu Gly Arg Pro
305
<210> 2084
<211> 308
<212> PRT
<213> Mus musculus
<400> 2084
Met Ser Asn Gln Thr Ser Val Thr Glu Phe Leu Leu Gly Val Thr
Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Val Phe Phe Thr Ile
Tyr Phe Val Asn Ile Thr Gly Asn Gly Ala Ile Leu Met Ile Val Ile
Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn Leu
                        55
Ala Cys Leu Asp Ile Cys Phe Ser Thr Val Thr Leu Pro Lys Met Leu
                    70
                                        75
Gln Asn Leu Leu Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys Ile
Thr Gln Leu His Phe Phe His Phe Leu Gly Ser Thr Glu Ala Met Leu
                                105
Leu Pro Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro Leu
                            120
                                                125
His Tyr Ser Val Ile Met Asn His Gln Leu Cys Ile His Met Thr Val
                        135
                                            140
Thr Ile Trp Thr Leu Gly Phe Phe His Ala Leu Leu His Ser Val Met
                    150
                                        155
Thr Ser Arg Leu Ser Phe Cys Gly Pro Asn His Val His His Phe Phe
                165
                                    170
                                                        175
Cys Asp Ile Lys Pro Leu Leu Asp Leu Ala Cys Gly Asn Thr Glu Leu
           180
                                185
                                                   190
Asn Leu Trp Leu Leu Asn Thr Val Thr Gly Thr Ile Ala Leu Thr Pro
       195
                            200
Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Ile Thr Tyr Leu Phe
                        215
                                            220
Leu Lys Thr Arg Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr Cys
                    230
                                        235
Ala Ser His Phe Met Val Val Ile Leu Leu Tyr Val Pro Val Leu Phe
                245
                                    250
Thr Tyr Ile Arg Pro Ala Ser Gly Ser Ser Leu Asp Gln Asp Arg Ile
                                265
Ile Ala Ile Met Tyr Ser Val Val Thr Pro Ala Leu Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser Ala Leu Asn Arg Lys Val
                        295
Arg Arg Trp Leu
305
<210> 2085
<211> 315
<212> PRT
<213> Mus musculus
```

Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Ala Leu Arg Leu Leu

```
<400> 2085
Leu Ser Val Ile Cys Gln Ile Leu Ala His Leu Gln Leu Glu Thr His
Ser Met Gln Thr Lys Gly Ser Thr Gly Ser Val Ala Phe Tyr Ile Ile
                                25
Thr Ile Leu Gly Asn Leu Gly Met Ile Ile Leu Ile Gln Val Asp Ile
                            40
Gln Leu His Thr Pro Met Tyr Phe Leu Leu Arg His Leu Pro Leu Leu
                        55
Asp Gly Thr Ser Ile Ser Leu Tyr Thr Ser Val Ile Thr Pro Gln Ile
                    70
                                        7.5
Met Ala Thr Leu Ala Lys Asn Lys Met Thr Ile Ser Cys Gly Arg Cys
                                    90
               85
Ala Thr Gln Phe Phe Ser Phe Thr Ile Cys Ala Val Thr Glu Cys Phe
            100
                                105
Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Asn Ser
        115
                            120
                                                125
Gln Leu Tyr Thr Val Ile Met Ser Pro Lys Lys Cys Trp Ser Leu Val
                        135
                                            140
Ala Val Ala Tyr Val Gly Gly Leu Phe Gly Val Ile Leu Arg Thr Thr
                    150
                                        155
Cys Thr Phe Ser Leu Phe Phe Cys Glu Asp Asn Gln Ile Asn Phe Phe
                                    170
                165
Phe Ser Asp Leu Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Ile
           180
                                185
Asn Ile Glu Ile Ile Val Val Cys Phe Gly Asn Phe Val Ile Leu Ala
        195
                            200
                                                205
Asn Ala Leu Val Ile Leu Ile Ser Asn Met Phe Ile Ile Lys Ala Val
                        215
                                            220
Ile Lys Leu Lys Ser Ser Gly Ser Arg Gly Lys Thr Phe Ser Thr Cys
                    230
                                        235
Thr Ser His Leu Thr Ala Val Gly Leu Leu Phe Gly Ile Leu Ile Phe
                245
                                    250
Ile Tyr Ile Gln Arg Ser Ser Gly Lys Ser Leu Glu Glu Asp Lys Val
                                265
Val Ser Val Phe Asn Thr Val Ile Ile Pro Met Leu Asn Pro Leu Ile
                            280
                                                285
Tyr Thr Leu Arg Asn Lys Asp Val Lys Ala Ala Phe Arg Lys Val Thr
                        295
Gly Arg Phe Gln Val Ser Gln Thr Leu Gln Asn
                    310
<210> 2086
<211> 277
<212> PRT
<213> Mus musculus
<400> 2086
Met Pro Asn Phe Thr Asp Val Thr Glu Phe Leu Leu Val Gly Leu Thr
                - 5
                                    10
Arg Arg Gln Glu Leu Arg Val Leu Phe Phe Val Val Phe Leu Val Val
            20
                                25
Tyr Met Val Thr Leu Leu Gly Asn Ile Gly Met Ile Ile Leu Ile Ser
                            40
Ile Ser Leu Gln Leu Gln Ser Pro Met Tyr Phe Phe Leu Ser His Leu
                        5.5
Ser Phe Val Asp Val Leu Phe Ser Ser Asn Val Thr Pro Lys Met Leu
```

```
Glu Asn Leu Ile Ser Glu Thr Lys Thr Ile Ser Tyr Val Gly Cys Leu
Val Gln Cys Tyr Phe Phe Ile Ala Leu Val His Val Glu Val Tyr Ile
                                105
Leu Ala Val Met Ala Phe Asp Arg Tyr Met Ala Ile Cys Asn Pro Leu
                            120
Leu Tyr Ser Ser Lys Met Ser Arg Val Val Cys Ile Arg Leu Ile Ser
    130
                        135
Val Pro Tyr Val Tyr Gly Phe Ser Val Ser Leu Ile Cys Thr Leu Trp
                    150
                                        155
Thr Tyr Gly Leu Tyr Phe Cys Gly Asn Ile Lys Ile Asn His Phe Tyr
                165
                                    170
Cys Ala Asp Pro Pro Leu Ile Lys Ile Ala Cys Gly Gly Val His Ile
                                185
Lys Glu Tyr Thr Met Ile Val Ile Ala Gly Ile Asn Phe Thr Tyr Ser
        195
                            200
Leu Ser Val Val Leu Ile Ser Tyr Val Leu Ile Val Val Ala Val Leu
                        215
Arg Met His Ser Ala Asp Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly
                    230
                                        235
Ser His Leu Thr Ala Val Ser Met Phe Tyr Gly Thr Leu Ile Phe Met
                245
                                    250
Tyr Leu Arg Arg Pro Thr Glu Glu Ser Val Glu Gln Gly Lys Met Val
            260
Ala Val Phe Tyr Thr
        275
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 2087

Ser Trp Glu Asp Gly Asn His Thr Ala Leu Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp Glu Pro Val Leu Arg Val Val Leu Phe Thr Ile Ile 25 Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe Phe Leu Ser His Leu Ala Ser Ala Asp Ile Gly Tyr Ser Ser Ser Val Thr Pro 70 75 Asn Met Leu Val Asn Phe Leu Val Glu Lys Asn Thr Ile Thr Tyr Leu 90 Arg Cys Gly Ile Gln Leu Gly Ser Ser Ala Phe Phe Gly Thr Val Glu 110 Cys Phe Val Leu Thr Ala Met Ala Tyr Asp Arg Phe Val Ala Ile Cys 120 Ser Pro Leu Leu Tyr Ser Thr Lys Met Ser Ile Gln Val Cys Ile Gln 140 Leu Leu Val Val Ala Tyr Ile Ser Gly Phe Leu Asn Ala Ser Ser Phe 150 Thr Leu Ser Phe Phe Thr Phe Phe Cys Gly Pro Asn Ile Ile Asn 170 His Phe Phe Cys Asp Phe Thr Pro Leu Val Glu Leu Ser Cys Ser Asp 185 Asp Arg Val Ser Ile Ile Leu Ala Thr Ile Ser Val Gly Thr Val Ile

```
195
                            200
Phe Ile Thr Val Leu Ile Ile Val Val Ser Tyr Ile Tyr Ile Leu Ile
                        215
                                             220
Thr Ile Leu Lys Met His Ser Thr Glu Gly Arg His Lys Ala Phe Ser
                    230
                                        235
Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Thr Val
                                    250
Thr Phe Ile Tyr Val Met Pro Lys Ser Asn Tyr Ser Thr Asp Gln Asn
                                265
                                                     270
Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu Asn Pro
                            280
        275
Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu Lys Arg
                        295
                                             300
Gln Leu Gly Arg Lys Ile Phe Ser
                    310
<210> 2088
<211> 315
<212> PRT
<213> Mus musculus
<400> 2088
Met Trp Met Ile Pro Gly Gln Asn Gln Ser Trp Val Ser Glu Phe Ile
                                     10
Leu Ile Gly Phe Ser Ser Asp Pro Thr Thr Asn Ser Ile Leu Phe Ile
                                 25
Val Phe Leu Leu Ile Tyr Leu Ser Ser Val Leu Gly Asn Gly Leu Ile
Ile Met Leu Val Cys Leu Asp Thr Gln Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Cys Thr Leu Ser Leu Leu Asp Met Ser Phe Val Thr Thr
                                        75
Val Pro Gln Met Leu Val His Leu Leu Ala His Ser Gln Thr Ile Ser
                                    90
Phe Ala Gly Cys Trp Leu Gln Met Phe Val Phe Gly Ala Leu Gly Met
            100
                                105
Thr Glu Cys Thr Phe Phe Val Val Met Ala Tyr Asp Arg Tyr Val Ala
        115
                            120
                                                 125
Ile Cys Tyr Pro Leu Arg Tyr Thr Val Ile Leu Asn Trp Gly Leu Cys
   130
                        135
Met Arg Leu Ala Ala Gly Thr Trp Ile Ser Gly Phe Phe Ser Ser Leu
                    150
                                        155
Leu His Thr Phe Phe Thr Met Ser Leu Pro Tyr Cys Gly Pro Asn Arg
                                    170
Val Asn His Tyr Phe Cys Glu Gly Pro Ser Val Arg Ser Leu Ala Cys
            180
                                185
Met Asp Thr His Ile Ile Glu Met Val Asp Ser Val Leu Ile Val Ile
        195
                            200
Leu Val Ile Val Pro Ile Ser Leu Ile Val Ala Ser Tyr Ile Arg Ile
                        215
Val Met Ala Ile Leu Lys Ile Lys Ser Thr Gln Gly Arg Cys Lys Ala
                    230
                                        235
                                                             240
Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Thr Leu Phe Tyr Val
                245
                                    250
                                                         255
Pro Ala Ser Tyr Ile Tyr Leu Arg Pro Asn Ser Ser Tyr Ser Pro Glu
            260
                                265
                                                    270
Arg Asp Lys Gln Val Ser Leu Phe Tyr Asn Val Phe Thr Ala Leu Leu
        275
```

280

Asn Pro Val Val Tyr Ser Leu Arg Asn Lys Asp Ile Lys Arg Ala Phe 290 295 300

Leu Lys Val Met Gly His Ala Arg Val Asp Ser 310 315

<210> 2089 <211> 447 <212> PRT <213> Mus musculus <400> 2089 Met Ser Val Phe Asn Ala Ser Asn Ile Glu Ile Pro Thr Phe Val Leu 10 Ile Gly Ile Pro Gly Leu Glu His Val His Ile Trp Leu Ser Ile Pro 20 25 Ile Cys Leu Met Tyr Leu Val Ala Ile Met Gly Asn Cys Thr Ile Leu 40 Phe Leu Ile Lys Thr Glu Thr Ser Leu His Glu Pro Met Tyr Tyr Phe 55 Leu Ser Met Leu Ala Phe Ser Asp Leu Gly Leu Ser Val Ser Ser Leu 70 75 Pro Thr Val Leu Arg Ile Phe Leu Phe Asn Ser Thr Glu Ile Ser Ser 90 85 Asp Ala Cys Phe Ala Gln Glu Phe Phe Ile His Gly Phe Ser Ala Met 105 110 100 Glu Ser Ser Val Leu Phe Ile Met Ala Ile Asp Arg Phe Ile Ala Val 115 120 125 Tyr Asn Pro Leu Arg Tyr Thr Ser Ile Leu Thr Val Arg Arg Val Phe 135 140 Lys Thr Gly Leu Ile Phe Ala Thr Phe Cys Ile Ala Val Val Leu Pro 150 155 Phe Pro Phe Ile Leu Lys Arg Leu Lys Phe Cys Lys Lys Ser Leu Leu 170 165 175 Ser His Ser Tyr Cys Leu His Gln Asp Val Met Lys Val Ala Cys Ser 180 185 190 Asn Asn Arg Ile Asn Val Ile Tyr Gly Phe Phe Val Ala Thr Ser Ser 195 200 Leu Leu Tyr Leu Val Phe Ile Ser Val Ser Tyr Met Leu Ile Leu Lys 220 215 Ile Val Leu Gly Cys Glu Glu Pro Pro Ser His Leu Pro Leu Asp Gly 230 235 Thr Asp Ser Cys Val Leu Ser Gly Lys His Asn Leu His Thr Cys Arg 250 245 Gly Ser Phe Pro Ala Met Cys Ser Ala Phe Pro Val Met Thr Thr Gly 265 Pro Met Gly Cys Ser Gln Ser Gly Ser Asn Thr Ser Ala Glu Asp Asn 280 Ser Pro Lys Gly Arg Val Leu Pro Leu Ser Leu Leu Leu Ser Cys Ser 295 300 Cys Ser Phe Ser Cys Phe Leu Ala Leu Ser Cys Phe Phe Val Leu Val 310 315 Leu Phe Leu Ser Leu Ala Leu Leu Ser Cys Ser Leu Ala Pro Glu 330 Asp Val Ser Asn Lys Ala Phe Ala Ala Glu Asp Ser Gly Leu Leu Arg 345 Ser Ser Trp Leu Val Val Asn Ala Gly Lys Met Gly Ile Thr Ser His Lys Gly Arg Leu Lys Phe Phe Asn Thr Cys Ile Ser His Ile Cys Ala

```
370
                        375
Val Leu Ile Phe Tyr Val Pro Ile Ile Thr Leu Ala Ala Leu His Arg
                    390
Phe Ala Lys Asn Ile Ser Pro Val Ile Gly Val Ile Ile Ala Asp Ile
                405
                                     410
Phe Leu Leu Val Pro Pro Leu Met Asn Pro Ile Val Tyr Ser Val Lys
                                 425
Ser Gln His Ile Arg Asn Leu Ile Gln Thr Lys Phe Cys Glu Lys
                             440
<210> 2090
<211> 325
<212> PRT
<213> Mus musculus
<400> 2090
Met Ala Phe Leu Pro Ala Ser Gly Val Ala Ala Val Asn Ser Ser Asp
Thr Arg Val Thr Gly Cys Leu Leu Thr Gly Ile Pro Gly Leu Glu His
Leu Gln Met Trp Leu Ser Ile Pro Phe Cys Ile Met Tyr Ile Ala Ala
                            40
Leu Val Gly Asn Ser Val Leu Val Cys Val Ile Leu Ser Gln Ser Ser
Leu His Glu Thr Met Tyr Ile Phe Leu Ser Met Leu Ala Ser Ala Asp
                    70
Val Leu Leu Ser Thr Ser Thr Met Pro Lys Thr Leu Ala Asn Phe Trp
                                    90
Leu Gly Ser Ser His Ile Ser Phe Asp Gly Cys Leu Thr Gln Met Phe
                                105
                                                     110
Phe Ile His Phe Leu Phe Val Ala Asp Ser Ala Val Leu Leu Ala Met
                            120
                                                 125
Ala Phe Asp Cys Tyr Val Ala Ile Cys Ser Pro Leu Arg Tyr Thr Thr
                        135
                                             140
Ile Leu Thr Arg Gln Val Met Gly Lys Met Ala Ala Ala Ile Leu Thr
                    150
                                         155
Arg Ser Phe Ile Ile Met Leu Pro Cys Ile Phe Leu Leu Lys Arg Leu
                                    170
                                                         175
His Tyr Cys Arg Ile Asn Val Ile Glu His Thr Phe Cys Glu His Met
            180
                                185
                                                     190
Gly Ile Ala Arg Leu Ser Cys Ser Asp Ile Ser Ile Asn Val Trp Tyr
                            200
Gly Leu Thr Ala Ala Leu Leu Ser Thr Gly Leu Asp Ile Ile Leu Ile
                        215
                                             220
Ala Val Ser Tyr Val His Ile Leu Ala Val Phe Arg Leu Ser Ser Gln
                    230
                                         235
Glu Ala Arg Ser Lys Ala Leu Ser Thr Cys Gly Ser His Val Cys Val
                245
                                    250
Ile Leu Leu Phe Tyr Ile Pro Ala Leu Phe Ser Val Phe Ala Tyr Arg
                                265
Phe Gly Gly Lys His Ile Pro Arg Tyr Val His Ile Leu Leu Ala Asn
        275
                            280
Leu Tyr Val Val Ile Pro Pro Met Leu Asn Pro Val Ile Tyr Gly Val
   290
                        295
Arg Thr Lys Gln Ile Leu Glu Gly Ala Lys Gln Met Phe Thr Asn Ile
                    310
                                        315
Thr Lys Glu Phe Lys
```

325

```
<210> 2091
<211> 309
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (90)...(95)
<223> Any amino acid
<400> 2091
Met Gly Thr Ala Leu His Glu Thr Asn Ser Ser Glu Val His Val Ser
Glu Phe Ile Leu Gly Phe Pro Gly Ile His Glu Phe Gln Ile Trp
                                 25
Leu Ser Leu Pro Met Ala Leu Leu Tyr Ile Val Ala Leu Gly Ala Asn
Leu Leu Ile Leu Ile Thr Ile Tyr Leu Glu Pro Thr Leu His Gln Pro
Met Tyr Gln Phe Leu Gly Ile Leu Ala Ala Val Asp Ile Gly Leu Ala
                    70
Thr Thr Ser Met Pro Lys Ile Arg Pro Xaa Xaa Xaa Xaa Xaa Tyr
Ala Ile His Thr Phe Met Cys Met Glu Ser Gly Val Phe Leu Cys Met
            100
                                105
                                                     110
Ala Ile Asp Arg Tyr Val Ala Ile Cys Tyr Pro Leu Gln Tyr Pro Ser
        115
                            120
                                                 125
Ile Val Thr Glu Ala Phe Val Ile Lys Ala Thr Leu Ser Met Leu Leu
                        135
                                             140
Arg Asn Gly Leu Leu Thr Ile Pro Val Pro Val Leu Ala Ala Gln Arg
                    150
                                        155
Gln Tyr Cys Ser Arg Asn Glu Ile Asp His Cys Leu Cys Ser Asn Leu
                165
                                    170
                                                         175
Gly Val Ile Ser Leu Ala Cys Asp Asp Ile Thr Val Asn Arg Phe Tyr
            180
                                185
                                                     190
Gln Leu Ala Leu Ala Trp Leu Val Val Gly Ser Asp Met Ile Leu Val
        195
                            200
                                                 205
Tyr Ala Ser Tyr Ala Leu Ile Ile Arg Ser Val Leu Arg Leu Asn Ser
                        215
                                             220
Thr Glu Ala Ala Ser Lys Ala Leu Ser Thr Cys Ser Ser His Leu Ile
                                         235
                    230
Leu Ile Met Phe Tyr Tyr Thr Ala Ile Val Ile Val Ser Val Thr His
                245
                                     250
                                                         255
Leu Ala Gly Arg Arg Val Pro Leu Ile Pro Val Leu Leu Asn Val Met
            260
                                265
                                                     270
His Ile Val Ile Pro Pro Ser Leu Asn Pro Val Val Tyr Ala Leu Arg
                            280
Thr Gln Glu Leu Lys Val Gly Phe Arg Lys Val Phe Ser Leu Ser Glu
                                             300
Phe Val Ser Arg Lys
305
<210> 2092
<211> 300
<212> PRT
<213> Mus musculus
```

```
Met Ile Lys Asn Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Ala
Leu Pro Ile Pro Pro Gln His Gln Gln Leu Phe Tyr Ala Leu Phe Leu
Ala Lys Phe Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser Thr
Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu
                    70
Leu Gln Asn Met Gln Ser Gln Asp Thr Ser Ile Thr Tyr Ala Gly Cys
                                    90
Leu Thr Gln Met Tyr Phe Phe Met Val Phe Ala Asn Met Glu Asn Val
                                105
Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro
                            120
Ile His Tyr Thr Ser Ile Met Ser Pro Lys His Cys Val Ser Leu Val
                        135
Val Leu Ser Trp Val Phe Thr Ile Leu Tyr Ser Met Leu His Thr Leu
                    150
Leu Leu Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His Phe
                                    170
Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile Tyr
                                185
                                                    190
Ile Asn Glu Val Met Ile Phe Ile Phe Glu Gly Leu Asp Thr Val Ile
                            200
Pro Phe Leu Leu Ile Phe Val Ser Cys Val Gln Ile Val Cys Ser Ile
                        215
Leu Lys Phe Ser Thr Trp Gly Ile Ala Lys Ile Phe Ser Thr Cys
                    230
                                        235
Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly
                245
                                    250
Leu Tyr Phe Cys Pro Thr Asn Asn Ser Thr Val Lys Asp Thr Ala Met
                                265
Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Ser Leu Met Asn Lys Asp Met Lys Glu Ala Leu Ile
    290
                        295
<210> 2093
<211> 310
<212> PRT
<213> Mus musculus
<400> 2093
Met Asn Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Gly Leu Pro
                                    10
Ile Pro Leu Glu Tyr Lys His Leu Phe Phe Ala Leu Phe Leu Thr Met
            20
                                25
Tyr Leu Asn Ile Ile Leu Gly Asn Leu Ile Ile Ile Leu Ile Leu
Leu Asp Thr His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu
   50
                        55
Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu
```

Gln Asn Met Gln Ser Gln Asp Pro Ser Ile Pro Tyr Ala Ser Cys Leu

70

<400> 2092

```
90
Thr Gln Met Tyr Phe Phe Met Ala Phe Gly Asn Met Glu Ile Tyr Leu
                                105
            100
Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu
                            120
                                                125
His Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu Val Val
                        135
Leu Ser Trp Val Phe Thr Ile Leu Tyr Ser Met Leu His Thr Leu Leu
                    150
                                        155
Leu Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His Phe Phe
                165
                                    170
Cys Asp Ile Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile Ser Ile
            180
                                185
                                                    190
Asn Glu Leu Met Ile Phe Ile Val Gly Gly Leu Asp Thr Val Ile Pro
        195
                            200
Phe Leu Leu Ile Val Val Ser Tyr Val Gln Ile Val Cys Ser Ile Leu
                        215
Lys Phe Ser Ser Thr Arg Gly Ile His Lys Val Phe Ser Thr Cys Gly
225
                    230
                                        235
                                                             240
Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Val
                245
                                    250
Tyr Ile Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Thr Val Met
            260
                                265
Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Leu Ile Arg Val Leu Cys
                        295
Lys Lys Gln Ile Ser Leu
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 2094

Met Pro Gly Lys Asn Gln Thr Ile Ile Ser Glu Phe Leu Leu Gly Leu Pro Ile Pro Pro Glu Gln Gln His Leu Phe Tyr Ala Leu Phe Leu Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu Leu Asn Met Gln Ser Gln Ile Pro Ser Ile Ser Tyr Ala Ser Cys Leu Ala Gln Met Tyr Phe Phe Leu Phe Phe Gly Ala Leu Glu Asn Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His Tyr Thr Ser Ile Met Ser Pro Arg Leu Cys Val Ser Met Val Val Met Cys Trp Val Leu Thr Thr Phe Asp Ala Met Leu His Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His

```
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr
            180
                                185
His Val Asn Glu Val Val Ile Phe Ile Ile Gly Gly Leu Gly Val Val
        195
                            200
Leu Pro Phe Leu Leu Ile Thr Val Ser Tyr Ala Arg Ile Ile Ser Ser
                        215
                                            220
Ile Leu Lys Val Pro Ser Thr Gln Gly Ile Gln Lys Val Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                245
                                    250
Gly Leu Tyr Leu Gly Pro Ser Ala Tyr Tyr Ser Thr Leu Lys Asp Thr
            260
                                265
                                                    270
Val Met Ser Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
        275
                            280
                                                 285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Lys Arg Leu
   290
                        295
                                            300
Phe Gln Lys Lys Thr Ile Phe
                    310
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 2095

Met Pro Arg Asn Asn Gln Thr Thr Ile Ser Gln Phe Leu Leu 10 Gly Leu Pro Ile Pro Gln Glu Phe Gln His Leu Phe Tyr Ala Leu Phe 20 25 Leu Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Ile 40 Leu Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu 55 Ser Asn Leu Ser Phe Thr Asp Leu Phe Ser Ser Val Thr Met Pro Lys 70 75 Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly 90 Cys Leu Thr Gln Met Tyr Phe Phe Leu Phe Phe Gly Asp Leu Glu Ser 105 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe 120 Pro Leu His Tyr Thr Ser Ile Met Ser Pro Arg Leu Cys Val Ser Leu 135 140 Val Leu Leu Ser Trp Leu Leu Thr Met Ser His Ser Met Leu His Thr 150 155 Leu Leu Leu Thr Arg Leu Ser Phe Cys Glu Asn Asn Val Ile Pro His 165 170 Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile 180 185 190 His Ile Asn Glu Leu Val Ile Leu Ile Ile Gly Gly Leu Val Val Ile 200 205 Leu Pro Phe Leu Leu Ile Thr Val Ser Tyr Ala Arg Ile Ile Ser Ser 215 220 Ile Leu Lys Val Pro Ser Thr Gln Gly Ile His Lys Val Phe Ser Thr 230 235 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile 250 Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Leu Lys Asp Thr

```
260
                                265
Val Met Ser Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
        275
                                                285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Leu Lys Arg Val
                        295
                                            300
Leu Gln Lys Lys Thr Ile Phe
                    310
<210> 2096
<211> 317
<212> PRT
<213> Mus musculus
<400> 2096
Met Glu Gln Asp Asn Gln Thr Trp Val His Glu Phe Ile Leu Leu Gly
                                    10
Leu Ser Asn Asp Trp Gly Thr Gln Val Ser Leu Phe Val Leu Phe Leu
            20
Leu Met Tyr Leu Val Thr Val Leu Gly Asn Phe Leu Ile Ile Val Leu
        35
                            40
Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                        55
Asn Leu Ser Leu Val Asp Ala Ser Tyr Ala Thr Ser Ile Val Pro Gln
                    70
                                        75
Leu Leu Ala His Phe Leu Ala Thr His Lys Ala Ile Pro Phe Leu Ser
                85
                                    90
Cys Ala Ala Gln Leu Phe Phe Ser Leu Gly Leu Gly Gly Ile Glu Phe
            100
                                105
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
                            120
Pro Leu Arg Tyr Ser Val Ile Met His Thr Gly Leu Cys Thr Arg Leu
                        135
Val Ile Thr Ser Trp Val Ser Gly Ser Ile Asn Ser Leu Val His Thr
                    150
                                        155
Ala Ile Thr Phe Gln Leu Pro Met Cys Thr Asn Lys Tyr Ile Asp His
                                    170
Ile Ser Cys Glu Ile Leu Ala Val Val Arg Leu Ala Cys Val Asp Ile
            180
                                185
Ser Ser Asn Glu Ile Val Ile Met Val Ser Ser Ile Val Leu Leu Met
                            200
Thr Pro Phe Phe Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr
                        215
Ile Leu Lys Ile Gln Ser Thr Glu Gly Arg Arg Lys Ala Phe His Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Val Val Thr Leu Cys Tyr Gly Thr Thr Ile
                245
                                    250
Phe Thr Tyr Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys
            260
                                265
Leu Ile Ser Leu Phe Tyr Ala Val Leu Met Pro Met Leu Asn Pro Met
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Trp Gln Lys Leu
                        295
                                            300
Leu Gly Lys Phe Ser Val Phe Thr Ser Lys Leu Thr Ser
                    310
```

```
Ile Phe Phe Phe His Phe Phe Gly Val Thr Glu Ile Leu Leu Thr
                    70
                                        75
Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Tyr Tyr
                85
                                    90
Thr Thr Ile Met Ser Arg Pro Lys Cys His Arg Leu Val Ala Gly Ser
                                105
Trp Val Gly Gly Phe Phe His Ser Ile Ile Gln Ile Phe Ile Thr Leu
                            120
Pro Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe Cys Asp
                        135
Leu His Pro Leu Phe Lys Leu Ala Cys Thr Asp Thr Phe Val Val Gly
                    150
                                        155
Val Ile Met Phe Val Asn Ser Gly Leu Phe Ser Val Phe Ser Phe Leu
                                    170
                165
Phe Leu Val Ser Ser Tyr Ile Val Ile Leu Tyr Asn Leu Arg Asn His
                                185
Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser His Ile
        195
                            200
Met Val Val Leu Phe Phe Gly Pro Ala Ile Phe Leu Tyr Leu Arg
                        215
Pro Ala Ser Thr Tyr Thr Glu Asp Lys Leu Val Ala Val Phe Tyr Thr
                    230
Val. Ile Thr Pro Met Leu Asn Pro Ile Ile Tyr Thr Leu Arg Asn Ala
                245
                                    250
Glu Val Lys Asn Ala Val Arg Lys Leu Trp Gly Lys Lys Val Ser Ser
Ser Leu Glu
        275
<210> 2099
<211> 308
<212> PRT
<213> Mus musculus
<400> 2099
Met Ala Asp Ile His Asn Val Thr Glu Phe Leu Phe Leu Gly Leu Ser
                                    10
Pro Asn Gln Glu Val Gln Arg Val Cys Phe Val Leu Phe Leu Leu
                                25
Tyr Met Ala Ile Val Leu Gly Asn Leu Leu Met Val Val Thr Val Val
Ala Ser Arg Asn Leu Gly Ser Pro Met Tyr Phe Phe Leu Asp Ser Leu
Ser Phe Val Glu Ile Tyr Ser Ser Met Thr Ala Thr Lys Leu Ile Leu
                    70
Asp Leu Leu Thr Glu Lys Lys Ser Ile Ser Val Trp Gly Cys Met Ile
                                    90
Gln Leu Phe Phe Ile His Phe Val Gly Ala Ala Glu Ile Phe Leu Leu
                                105
Thr Met Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys Lys Pro Leu His
                            120
                                                125
Tyr Thr Ser Ile Met Asn Gln Ser Val Cys Ala Val Leu Leu Gly Thr
                                            140
```

Ala Trp Met Gly Gly Phe Val His Cys Leu Ala Gln Ile Leu Leu Leu

Leu Pro Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe Cys

155

170

```
Asp Val Phe Pro Val Leu Lys Leu Ala Cys Ser Asp Thr Phe Leu Ile
                                185
Gly Leu Leu Ile Val Ala Asn Gly Gly Thr Leu Ser Val Ile Ser Phe
                            200
                                                 205
Val Val Leu Leu Ala Ser Tyr Val Val Ile Phe Phe Tyr Leu Arg Thr
                        215
Gln Ser Ala Glu Gly Trp Arg Lys Thr Leu Ala Thr Cys Gly Cys His
                                        235
                    230
Val Thr Val Val Ile Leu Phe Phe Gly Pro Cys Val Phe Ile Tyr Leu
                245
                                    250
Arg Pro Ser Asp Thr Leu Pro Val Asp Lys Met Ile Ala Val Phe Tyr
            260
                                265
Thr Val Ile Thr Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn
Ala Glu Val Lys Lys Thr Met Lys Cys Leu Trp Phe Arg Thr Met Lys
                                            300
Val Asp Glu Lys
```

<210> 2100 <211> 307 <212> PRT <213> Mus musculus

<400> 2100

Met Asn Tyr Arg Thr Asn Ile Thr Glu Phe Ile Leu Leu Gly Phe Ser Gln Thr Lys Glu Ile Glu Val Ile Cys Phe Val Leu Phe Leu Leu Cys 25 Tyr Ile Ala Ile Leu Phe Gly Asn Leu Leu Ile Met Ile Ser Val Thr 40 Trp Ser His Leu Ile Asn Gln Pro Met Tyr Phe Phe Leu Ser Tyr Leu 55 Ala Leu Ser Asp Leu Cys Tyr Thr Ser Thr Val Thr Pro Lys Leu Ile 70 75 Ile Asn Leu Val Thr Thr Lys Lys Ser Ile Ser Tyr Asn Gly Cys Met 90 85 Thr Gln Leu Phe Thr Met His Phe Phe Gly Gly Ile Glu Val Phe Ile 105 100 Leu Thr Gly Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 115 His Tyr Thr Ile Leu Met Ser Arg Gln Lys Cys Asp Ala Val Ile Ala 135 140 Ala Ser Cys Ala Gly Gly Phe Leu His Ser Phe Gly Gln Phe Ile Leu 155 150 Ala Val Phe Leu Pro Tyr Cys Gly Pro Asn Glu Ile Asp His Tyr Phe 165 170 Cys Asp Val Tyr Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr Arg Lys 180 185 190 Ile Gly Phe Leu Val Ile Ala Asn Ser Gly Leu Met Gly Leu Val Thr 195 200 Phe Val Val Leu Leu Ile Ser Tyr Gly Val Ile Leu Tyr Thr Val Arg Ser Tyr Ser Ala Glu Asn Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser 230 235 His Ile Thr Val Val Leu Phe Phe Ala Pro Leu Leu Phe Ile Tyr Ile Arg Pro Ala Thr Thr Leu Pro Glu Asp Lys Val Phe Ala Leu Phe

```
260
                                265
Tyr Thr Ile Ile Ala Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
Asn Lys Glu Met Lys Asn Ala Ile Lys Arg Leu Cys Tyr Leu Met Ser
    290
                        295
                                             300
Gly Ser Glu
305
<210> 2101
<211> 306
<212> PRT
<213> Mus musculus
<400> 2101
Lys Asp Thr Asp Ser Pro Asn Gln Thr Ala Thr Glu Phe Leu Leu Leu
Gly Phe Ser Gly Lys Ser Glu Gln Glu Val Val Phe Gly Met Phe
Leu Gly Met Tyr Leu Val Thr Ile Ser Gly Asn Leu Leu Ile Ile Leu
        35
Ala Ile Ser Cys Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu
                        5.5
Ala Asn Leu Ser Ser Val Asp Ile Ser Ala Pro Ser Val Ile Val Pro
                                         75
Lys Ala Val Asn Tyr Met Leu Gly Ile Lys Thr Ile Ser Tyr Thr Glu
                85
                                    90
Cys Met Ile Gln Ile Tyr Phe Phe Ile Thr Phe Ile Asn Met Asp Gly
                                105
Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
                                                125
Pro Leu Arg Tyr Thr Met Met Arg Ser Arg Leu Cys Val Leu Leu
                        135
                                            140
Val Ala Ile Ser Trp Val Ile Thr Asn Leu His Ala Leu Leu His Thr
                    150
                                        155
Leu Leu Met Val Arg Leu Thr Phe Cys Ser His Asn Ala Val His His
                165
                                    170
Phe Phe Cys Asp Pro Tyr Pro Ile Leu Lys Leu Ser Cys Ser Asp Thr
            180
                                185
                                                     190
Phe Ile Asn Asp Val Ala Ala Phe Thr Glu Gly Pro Leu Ile Phe Leu
        195
                            200
Thr Pro Leu Ile Cys Ile Val Leu Ser Tyr Ala Tyr Ile Tyr Ala Lys
                        215
Val Leu Lys Met Pro Ser Ala His Arg Ile Arg Lys Ala Leu Ser Thr
                    230
                                        235
Cys Gly Phe His Leu Thr Val Val Cys Leu Phe Tyr Gly Ala Ile Leu
                                    250
Gly Ala Tyr Lys His Pro Ser Ser Ser Tyr Ser Leu Gln Asp Ala Val
            260
                                265
                                                     270
Ala Ser Ile Ile Phe Asn Val Val Thr Pro Met Val Asn Pro Phe Ile
                            280
Tyr Ser Lys Arg Asn His Asp Ile Lys Gly Ala Leu Lys Lys Phe Cys
                        295
                                            300
Arg Thr
305
```

Val Met Thr Leu Val Ala Asp Ala Phe Tyr Gly Gly Ile Asn Phe Leu 100 105 110 Leu Thr Leu Leu Ser Tyr Gly Cys Ile Ile Ala Ser Ile Leu His Met

```
120
Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe Ser Thr Cys Ser Ser His
                       135
                                            140
Leu Ile Val Val Ser Val Tyr Tyr Ser Ser Val Phe Cys Ala Tyr Val
                   150
                                        155
Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg Ser Lys Phe Thr Ser Val
                165
                                    170
Leu Tyr Ser Val Leu Ser Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu
                               185
                                                    190
Arg Asn Lys Asp Val Lys Leu Ala Leu Arg Arg Leu Leu Pro Ser Phe
                            200
<210> 2104
<211> 311
<212> PRT
<213> Mus musculus
<400> 2104
Met Asn Glu Val Asn Gln Ser Met Val Ser Glu Phe Val Leu Leu Gly
1
                                    10
Leu Ser Asn Ser Gln Asn Leu Gln Val Leu Leu Phe Val Ile Phe Leu
Ile Val Tyr Leu Leu Ile Leu Ser Gly Asn Ile Val Ile Val Ile Leu
                            40
Ile Thr Ile Asp Arg His Leu His Ser Pro Met Tyr Phe Leu Leu Ala
Asn Leu Ser Phe Val Asp Ile Trp Leu Ser Val Thr Thr Pro Lys Met
                    70
Val Thr Asp Phe Leu Arg Glu Asn Lys Thr Ile Ser Phe Glu Gly Cys
               85
Met Ser Gln Val Phe Phe Asp His Cys Ile Gly Ala Ala Glu Met Val
                               105
           100
Leu Leu Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                           120
                                                125
Leu His Tyr Phe Thr Ile Met Asn Leu Lys Arg Cys Thr Ala Leu Val
                       135
                                           140
Leu Ile Ser Trp Thr Ile Gly Phe Val His Ala Leu Ser Gln Leu Val
                   150
                                        155
Pro Val Leu Gln Leu Pro Phe Cys Gly Pro Leu Glu Ile Asp Ser Phe
                165
                                    170
Phe Cys Asp Ile Pro Leu Val Ile Asn Leu Ala Cys Met Asp Ser His
                                185
                                                    190
His Leu Asp Thr Leu Val Asn Ala Asp Cys Gly Val Val Val Thr
        195
                            200
Cys Phe Ile Leu Leu Ile Ser Tyr Thr Tyr Ile Leu Ile Thr Val
His Gln Ser Ser Lys Ala Gly Ala Ser Lys Ala Leu Ser Thr Cys Thr
                    230
                                        235
Ala His Ile Thr Val Val Leu Leu Phe Val Pro Cys Ile Phe Ile
                                    250
Tyr Val Trp Pro Leu Asn Ile Thr Trp Phe Asp Lys Phe Leu Ala Val
                                265
Phe Tyr Ser Val Val Thr Pro Leu Leu Asn Pro Ala Ile Tyr Thr Leu
                            280
Arg Asn Lys Asp Ile Lys His Ser Leu Lys Arg Leu Lys Ser Ser Phe
                        295
                                            300
Met Asn His Lys Val Asn Thr
```

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<210> 2105
<211> 314
<212> PRT
<213> Mus musculus
<400> 2105
Met Ser Asn Tyr Thr Gly Gln Ser Tyr Phe Thr Leu Val Gly Leu Phe
Ser Gln Ser Lys His Pro Ala Leu Leu Ala Val Val Ile Phe Val Val
Phe Leu Met Ser Leu Ser Gly Asn Ala Leu Leu Ile Leu Leu Ile Leu
Ser Asp Thr His Leu His Thr Pro Met Tyr Phe Phe Ile Ser Gln Leu
Ser Leu Met Asp Met Met Tyr Ile Ser Val Thr Val Pro Lys Met Leu
                                         75
Met Asp Arg Ile Leu Gly Asn His Lys Val Ser Gln Ala Ala Ala Cys
                                    90
Gly Met Gln Met Phe Leu Tyr Met Ser Leu Gly Gly Ser Glu Phe Leu
                                105
                                                     110
Leu Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro
                            120
                                                125
Leu Arg Tyr Pro Val Leu Met Asn His Arg Val Cys Leu Leu Ile
                        135
                                            140
Ser Thr Cys Trp Ile Leu Gly Ser Leu Asp Gly Phe Met Phe Thr Pro
                    150
                                        155
Val Thr Met Thr Phe Pro Phe Cys Gly Ser Arg Glu Ile His His Phe
                                    170
                                                         175
Phe Cys Glu Ala Pro Ala Val Thr Lys Leu Ser Cys Ser Asp Thr Trp
                                185
                                                     190
Leu Tyr Glu Thr Leu Met Tyr Val Cys Cys Val Leu Met Ile Leu Ile
        195
                            200
                                                205
Pro Val Thr Val Ile Ser Gly Ser Tyr Thr Ser Ile Leu Leu Thr Val
                        215
                                            220
Leu Arg Met Asn Ser Ala Glu Gly Arg Lys Lys Ala Leu Ala Thr Cys
                    230
                                        235
Ser Ser His Met Thr Val Val Thr Leu Phe Tyr Gly Ala Ala Ile Tyr
                                    250
Thr Tyr Ile Phe Pro Val Ser Leu His Ser Pro Glu Lys Asp Met Val
                                265
                                                     270
Val Ser Val Phe Tyr Thr Ile Leu Thr Pro Leu Leu Asn Pro Leu Ile
                            280
                                                285
Tyr Ser Leu Arg Asn Lys Asn Val Thr Glu Gly Tyr Glu Glu Thr Val
                        295
                                             300
Gly Tyr Lys Thr Pro Leu Ser Gln Lys Gln
305
<210> 2106
<211> 208
<212> PRT
<213> Mus musculus
<400> 2106
Met Glu Ser Gly Asn Ser Thr Arg Arg Ile Pro Ser Phe Phe Leu Leu
```

Gly Phe Ser Glu Asn Pro His Leu Gln Phe Leu Ile Phe Val Leu Phe

```
Leu Ser Met Tyr Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Met
Val Ile Ile Thr Gln Ser Pro Leu His Thr Pro Met Tyr Phe Phe Leu
Ala Asn Leu Ser Phe Val Asp Ile Cys Phe Thr Ser Thr Thr Val Pro
                                        75
Lys Met Leu Val Asn Ile Gln Thr Gln Ser Lys Ala Ile Thr Tyr Ala
                8.5
Asp Cys Ile Ser Gln Met Ser Val Phe Leu Val Phe Ala Glu Leu Asp
            100
                                105
Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
        115
                            120
His Pro Leu Tyr Tyr Thr Phe Ile Val Asn Gln His Leu Cys Ile Leu
                        135
                                            140
   130
Met Val Leu Leu Ser Trp Val Val Ser Ile Leu His Ala Phe Leu Gln
                    150
                                        155
Ser Ser Ile Val Leu Gln Leu Thr Phe Cys Gly Asp Val Lys Ile Pro
                165
                                    170
His Phe Phe Cys Glu Leu Asn Gln Leu Ser Gln Leu Thr Cys Leu Asp
                                185
                                                     190
            180
Ser Leu Ser Ser His Leu Ile Met Asn Leu Val Pro Val Leu Leu Gly
                            200
```

<211> 221

<212> PRT

<213> Mus musculus

<400> 2107

Phe Leu Ala Cys Ala Ala Asp Val Leu Leu Leu His Ile Trp Leu Thr 10 His Ser Phe Leu Leu Thr Val Met Gly Tyr Asp Arg Tyr Val Ala Ile 25 Cys His Pro Leu Arg Tyr Asn Val Leu Met Ser Pro Arg Gly Cys Ala 40 Cys Leu Val Thr Trp Ser Trp Val Gly Gly Ser Phe Met Gly Thr Val 55 Val Thr Thr Ala Ile Phe Asn Leu Thr Phe Cys Gly Pro Asn Glu Ile 70 75 His His Phe Ala Cys His Val Pro Pro Leu Leu Lys Leu Ala Cys Gly 8.5 90 Glu Asn Val Leu Glu Val Ala Lys Gly Val Gly Ile Val Cys Ile Thr 105 100 110 Ala Leu Leu Gly Cys Phe Leu Leu Ile Leu Leu Ser Tyr Ala Phe Ile 115 120 125 Val Val Thr Ile Leu Lys Ile Pro Ser Ala Glu Gly Arg His Lys Ala 135 140 Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Val His Tyr Gly 150 155 Phe Ala Ser Val Ile Tyr Leu Lys Pro Lys Gly Pro Lys Ser Leu Glu 170 165 Gly Asp Thr Leu Met Gly Ile Thr Tyr Thr Val Leu Thr Pro Phe Leu 185 190 180 Ser Pro Ile Ile Phe Ser Leu Arg Asn Lys Glu Leu Lys Asn Ala Met 200 205 Lys Lys Ile Phe Leu Ser Lys Leu Tyr Pro Glu Lys Ile 215

```
<211> 308
<212> PRT
<213> Mus musculus
<400> 2108
Met Met Asn Phe Ser Ile Val Ser Glu Phe Met Ile Leu Gly Leu Thr
                5
Gln Lys Ser Glu Leu Gln Gly Ile Leu Phe Ile Val Phe Leu Phe Ile
            20
                                25
Tyr Leu Val Ala Leu Leu Gly Asn Met Leu Ile Val Val Ala Ile Ile
                            40
Tyr Asn Thr Thr Leu His Thr Pro Met Tyr Ile Leu Leu Leu Ala Leu
                        55
Ala Val Val Asp Ile Ile Cys Thr Thr Ser Ile Ile Pro Lys Met Leu
                    70
                                        75
Gly Thr Met Leu Thr Ser Lys Asn Ser Ile Ser Tyr Gly Gly Cys Met
                                                        95
                85
                                    90
Ser Gln Leu Phe Phe Phe Thr Trp Ser Leu Gly Ala Glu Met Val Leu
                                105
                                                    110
            100
Phe Thr Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu
                            120
                                                125
        115
Arg Tyr Ser Thr Ile Met Asn His Tyr Thr Cys Val Gly Leu Leu Ser
   130
                        135
                                            140
Ile Val Met Ala Ile Ala Val Thr Asn Ser Trp Val His Thr Gly Leu
                                        155
                    150
Ile Leu Arg Leu Thr Phe Cys Gly Pro Asn Ile Ile Asp His Phe Phe
                165
                                    170
                                                        175
Cys Glu Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Pro Val Arg Val
                                185
                                                    190
            180
Asn Glu Val Met Val Tyr Val Ala Asp Ile Thr Leu Ala Val Gly Asp
                                                205
        195
                            200
Phe Thr Leu Thr Cys Ile Ser Tyr Gly Phe Ile Ile Ala Ala Ile Leu
                        215
                                            220
Arg Ile Arg Thr Thr Glu Gly Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Leu Met Val Val Ser Leu Tyr Tyr Ser Pro Val Ile Tyr Thr
                245
                                    250
                                                        255
Tyr Ile Arg Pro Ala Ser Ser Tyr Thr Phe Asp Lys Asp Lys Val Val
            260
                                265
                                                    270
Ala Ala Leu Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro Ile Val Tyr
                                                285
                            280
Ser Phe Arg Asn Lys Glu Met Gln Ser Gly Ile Lys Lys Val Phe Ala
   290
                        295
Phe Leu Lys Gly
305
<210> 2109
<211> 318
<212> PRT
<213> Mus musculus
<400> 2109
Met Asp Val Ser Asn Gln Thr Thr Val Thr Glu Phe Val Leu Leu Gly
Leu Ser Ala His Pro Lys Leu Glu Lys Thr Phe Phe Val Leu Ile Leu
```

```
Ser Met Tyr Leu Val Ile Leu Leu Gly Asn Gly Val Leu Ile Leu Val
Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Gly
                        5.5
Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Val Pro Leu
                    70
Val Leu Asp Gly Phe Leu Thr Pro Arg Lys Thr Ile Ser Phe Ser Gly
                85
                                    90
Cys Ala Val Gln Met Phe Leu Ser Phe Ala Met Gly Ala Thr Glu Cys
            100
                                105
Val Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn
       115
                            120
                                                 125
Pro Leu Arg Tyr Pro Val Val Met Asn Lys Ala Ala Tyr Val Pro Met
                        135
                                            140
Ala Val Ser Ser Trp Val Ala Gly Gly Ala Asn Ser Leu Val Gln Ile
                    150
                                        155
Ser Leu Ala Val Gln Leu Pro Phe Cys Gly Asp Asn Val Ile Asn His
                                    170
                165
Phe Ile Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Ile
            180
                                185
                                                     190
Ser Ile Asn Val Ile Ser Met Gly Val Ala Asn Val Ile Phe Leu Gly
       195
                            200
Val Pro Val Leu Phe Ile Phe Val Ser Tyr Ile Phe Ile Leu Ser Thr
                        215
                                            220
Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ala His Leu Thr Val Val Ile Ile Phe Tyr Gly Thr Ile Leu
                245
                                    250
Phe Met Tyr Gly Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala Asp Lys
            260
                                265
Gln Asp Leu Ala Asp Lys Leu Ile Ser Leu Phe Tyr Gly Leu Leu Thr
       275
                            280
Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
                        295
Ala Ala Val Arg Asn Leu Ala Ser His Arg Cys Leu Thr Phe
                    310
                                         315
```

<211> 309

<212> PRT

<213> Mus musculus

<400> 2110

Met Glu Asp Met Ala Ala Gly Asn His Cys Thr Val Thr Glu Phe Phe Leu Val Gly Leu Ser Glu Lys Pro Glu Leu Arg Leu Pro Leu Phe Leu Phe Phe Thr Gly Ile Tyr Leu Ile Thr Val Thr Gly Asn Val Gly Met 40 Ile Thr Leu Ile Gly Leu Ser Ser His Leu His Thr Pro Met Tyr Phe 55 Phe Leu Asp Ser Leu Ser Phe Ile Asp Phe Cys Gln Pro Lys Met Leu 70 75 Val Ser Phe Leu Thr Lys Gln Asn Ile Ile Ser Tyr Thr Gly Cys Met 90 95 Ala Gln Leu Tyr Leu Val Ile Thr Phe Gly Val Ala Glu Cys Tyr Thr 100 105 110

```
Leu Ala Ala Met Ala Tyr Asp His Tyr Val Ala Ile Cys Asn Pro Leu
                            120
Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Tyr Ser Ser Leu Ile Ser
                        135
                                             140
Gly Val Tyr Ile Phe Ala Val Phe Cys Ser Ser Leu Asn Thr Gly Leu
                    150
                                        155
Met Phe Arg Thr Gln Phe Cys Asn Leu Asp Val Ile Asn His Tyr Phe
                                    170
Cys Asp Leu Pro Leu Leu Lys Leu Ala Ser Ser Asn Thr Tyr Thr Asn
                                185
Glu Ile Leu Ile Leu Phe Phe Ala Thr Leu Asn Val Phe Val Thr Val
                            200
Leu Thr Ile Ile Thr Ser Tyr Ile Phe Ile Ile Ala Thr Ile Arg Cys
                        215
Ile His Ser Arg Glu Gly Lys Phe Lys Ala Phe Ser Thr Cys Ser Ser
                    230
                                         235
His Ile Ser Ala Val Ala Ile Phe Tyr Gly Ser Gly Ala Phe Thr Tyr
                245
                                    250
Leu Gln Pro Ser Ser Leu Asn Ser Met Gly Gln Ala Lys Val Ser Ser
                                265
Val Phe Tyr Thr Thr Val Val Pro Met Leu Asn Pro Leu Ile Tyr Ser
        275
                            280
Leu Arg Asn Lys Asp Val Ser Ile Ala Leu Lys Lys Ile Leu Gln Arg
   290
                        295
                                             300
Lys Lys Asn His Val
305
```

<210> 2111 <211> 320 <212> PRT

<213> Mus musculus

<400> 2111

Met Leu Tyr Pro Ser Ser Met Ser Glu Ile Thr Asn Phe Thr His Asp Pro Phe Tyr Phe Ile Leu Thr Gly Ile Pro Gly Phe Glu Asp Ile His 20 25 Leu Trp Ile Ser Ile Pro Phe Cys Leu Tyr Thr Ile Ser Ile Met Gly 40 Asn Thr Thr Ile Leu Thr Val Ile Cys Thr Glu Pro Ser Leu His Gln 55 60 Pro His Tyr Leu Phe Leu Ser Met Leu Ala Leu Thr Asp Leu Gly Leu 70 75 Ala Leu Thr Thr Leu Pro Thr Ile Met His Leu Leu Trp Phe Asn Ile 85 90 Arg Glu Ile Ser Phe Glu Ala Cys Phe Ala Gln Phe Phe Leu His 100 105 Gly Phe Ser Phe Met Glu Ser Ser Val Leu Leu Ala Met Ser Phe Asp 120 125 Arg Tyr Val Ala Ile Cys Cys Pro Leu His Tyr Ala Ser Ile Leu Thr 130 135 140 Ser Glu Val Ile Ala Arg Ile Gly Leu Ala Ile Ile Cys Arg Cys Val 150 155 Leu Ala Val Leu Pro Phe Leu Phe Leu Leu Lys Arg Leu Ser Phe Cys 170 165 175 His Ser His Leu Leu Ser His Ser Tyr Cys Leu His Gln Asp Met Ile 185 His Leu Val Cys Thr Asp Ile Arg Val Asn Ser Trp Tyr Ala Phe Ala

```
200
                                                205
        195
Leu Val Leu Leu Ile Ile Ile Leu Asp Pro Leu Leu Ile Val Leu Ser
                                            220
                        215
Tyr Ala Val Ile Leu Lys Ser Val Leu Asn Thr Ala Thr Trp Thr Glu
                    230
                                        235
Arg Leu Arg Ala Leu Asn Asn Cys Leu Ser His Met Leu Ala Val Leu
                245
                                    250
Val Leu Tyr Val Pro Met Val Gly Val Ser Met Thr His Arg Phe Ala
                                265
                                                    270
            260
Lys His Ala Ser Pro Leu Val His Val Leu Met Ala Asn Ile Tyr Leu
                            280
Leu Ala Pro Pro Val Met Tyr Pro Ile Ile Tyr Ser Val Lys Thr Lys
                        295
Gln Ile Arg Gln Gly Ile Thr Arg Leu Leu Gln Arg Lys Val His
<210> 2112
<211> 307
<212> PRT
<213> Mus musculus
<400> 2112
Met Lys Asn Ser Thr Glu Val Thr His Phe Leu Leu Gly Leu Thr
                5
                                    10
Asp Asp Pro Gly Leu Gln Leu Pro Leu Phe Leu Ile Phe Leu Phe Ile
            20
Tyr Thr Ile Thr Leu Val Gly Asn Leu Gly Met Ile Leu Leu Ile Val
                            40
Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Cys Asn Leu
                        55
Ser Leu Val Asp Phe Cys Tyr Ser Ser Ala Val Thr Pro Thr Val Met
                    70
                                        75
Thr Gly Leu Leu Ile Gly Asn Lys Ile Ile Ser Tyr Asn Gly Cys Ala
                8.5
Ala Gln Met Phe Phe Phe Ala Gly Phe Ala Thr Val Glu Asn Tyr Leu
                                105
            100
Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu
                            120
                                                125
        115
His Tyr Ser Ser Thr Met Thr Thr Ser Val Cys Ile Ser Leu Ser Ile
                        135
                                            140
Val Ser Tyr Ala Cys Gly Phe Leu Asn Ala Ser Ile His Ile Gly Asp
                    150
                                        155
Thr Phe Ile Leu Ser Phe Cys Arg Ser Asn Val Val His His Phe Phe
                                    170
                165
Cys Asp Val Pro Ala Val Met Val Leu Ser Cys Ser Asp Arg His Val
            180
                                185
                                                    1.90
Ser Glu Leu Val Leu Val Tyr Ile Val Ser Phe Asn Ile Phe Val Ala
        195
                            200
Leu Ser Val Ile Trp Ile Ser Tyr Ile Phe Ile Phe Ile Thr Ile Phe
                        215
                                             220
Lys Met Lys Ser Ser Ala Gly Tyr Arg Lys Ala Ile Ser Thr Cys Ala
                                        235
                    230
Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe Met
                                    250
Tyr Leu Gln Pro Ser Phe Ser His Ser Met Asp Thr Asp Lys Ile Ala
                                265
                                                    270
Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val Tyr
                            280
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Gly Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Ile Lys Thr Phe Gln
   290
Val Ala Lys
305
<210> 2113
<211> 319
<212> PRT
<213> Mus musculus
<400> 2113
Met Asn His Ser Ser Val Ile Asp Phe Ile Leu Glu Gly Leu Thr Lys
Arg Pro Glu Leu Gln Leu Pro Leu Phe Leu Phe Leu Ala Ile Tyr
Val Ile Thr Val Val Gly Asn Leu Gly Met Ile Leu Leu Ile Thr Ile
Ser Ser Gln Leu His Ser Pro Met Tyr Tyr Phe Leu Ser Xaa Xaa
                     55
90
100
                            105
                                              110
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Leu Gln Lys Gly Tyr Leu
                        120
                                          125
Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser Pro Leu
                     135
                                       140
Leu Tyr Asn Ile Val Met Ser His Lys Val Cys Ser Ile Met Met Ala
                 150
                                   155
Val Val Tyr Ser Leu Gly Phe Phe Gly Ala Thr Val His Thr Thr Arg
                                170
                                                 175
Met Thr Met Leu Ser Phe Cys Gly Ser His Ile Val Ser His Tyr Phe
                            185
                                              190
Cys Asp Ile Leu Pro Leu Leu Thr Leu Ser Cys Ser Ser Thr His Ile
                        200
Asn Glu Val Leu Leu Phe Ile Ile Gly Gly Val Asn Thr Leu Ala Pro
                     215
                                       220
Thr Leu Ala Phe Ile Leu Thr Ser Ile Leu Arg Ile Arg Ser Asn Glu
                 230
                                   235
Gly Arg Ser Lys Ala Phe Gly Thr Cys Ser Ser His Ile Met Ala Val
                                250
                                                 255
Gly Ile Phe Phe Gly Ser Ile Thr Phe Met Tyr Phe Lys Pro Pro Ser
                            265
                                              270
Ser Asn Asn Met Glu Gln Glu Lys Val Ser Ser Val Phe Tyr Thr Thr
                        280
Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp
Val Lys Asn Ala Leu Lys Lys Met Val Gly Gly Arg Gln Leu Ser
                 310
                                   315
<210> 2114
<211> 335
<212> PRT
<213> Mus musculus
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<220>
<221> VARIANT
<222> (102)...(108)
<223> Any amino acid
<400> 2114
Lys Phe Thr Thr Ser Thr Asp Glu Val Leu Phe Lys Arg Glu Lys Leu
                5
                                    10
Asn Ala Ser Thr Leu Met Glu Phe Ile Leu Leu Gly Phe Ser Asn Val
                                25
Pro His Leu Gln Trp Val Leu Phe Met Val Phe Leu Phe Met Tyr Met
                            40
Thr Ile Leu Leu Cys Asn Ser Ile Ile Ile Val Leu Ala Lys Thr Asp
                        55
Pro Ala Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser Asn Phe Ser Phe-
                    70
                                        75
Leu Glu Ile Cys Tyr Val Thr Ala Thr Ile Pro Arg Met Leu Met Asp
                85
                                    90
Leu Tyr Thr Lys Glu Xaa Xaa Xaa Xaa Xaa Xaa Glu Thr Phe Leu
                                105
            100
                                                    110
Cys Leu Pro Val Gln His Lys Met Tyr Phe Val Leu Thr Leu Gly Gly
                            120
       115
                                                125
Thr Glu Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala
                        135
                                            140
Ile Cys His Pro Leu Gln Tyr Ser Leu Leu Met Lys Asn Lys Val Cys
                    150
                                        155
Leu Gln Leu Val Ala Ala Ser Trp Ile Ser Gly Ile Pro Val Glu Ile
               165
                                    170
                                                        175
Gly Gln Thr Tyr Gln Ile Phe Ser Leu His Phe Cys Ala Ser Asn Arg
            180
                                185
                                                    190
Ile Asp His Phe Phe Cys Asp Ile Pro Pro Leu Leu Lys Leu Ala Cys
        195
                            200
                                                205
Gly Asp Thr Phe Met Asn Thr Val Ala Val Tyr Val Val Ala Val Leu
                        215
                                            220
Phe Val Met Val Pro Phe Leu Leu Ile Ile Val Ser Tyr Ile Lys Ile
                    230
                                        235
Ile Cys Asn Ile Met Lys Leu Ser Ser Ala Lys Gly Met Ala Lys Ala
                245
                                    250
Phe Ser Thr Cys Ser Ser His Leu Ile Val Val Ile Leu Phe Tyr Gly
            260
                                265
Thr Ala Ser Ile Thr Tyr Leu Gln Pro Lys Gln Ser Gln Ser Glu Gly
        275
                            280
                                                285
Met Gly Lys Met Leu Ser Leu Phe Tyr Thr Ile Leu Ile Pro Ala Leu
                        295
                                            300
Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Ile Met Met Ala Leu
                    310
                                        315
Arg Lys Leu His Ser Lys Leu Leu Ile Trp Trp Glu Asn Leu Lys
                                    330
<210> 2115
<211> 309
<212> PRT
<213> Mus musculus
<400> 2115
Met Ser Asn Leu Ser Thr Ser Arg Phe Val Leu Thr Gly Phe Pro Gly
```

Leu Glu Val Tyr Tyr Phe Phe Ala Ile Pro Phe Ser Thr Ile Tyr

```
Ala Met Val Phe Leu Gly Asn Cys Met Ile Leu His Val Ile Arg Thr
Glu Ser Ser Leu His Gln Pro Met Phe Tyr Phe Leu Ala Met Leu Ala
                        55
Leu Thr Asp Leu Cys Met Gly Leu Ser Thr Val His Thr Val Leu Gly
                                        75
Ile Leu Trp Gly Phe Leu Gln Glu Ile Ser Leu Asp Ala Cys Ile Ala
                                    90
Gln Ser Tyr Phe Ile His Gly Leu Ser Phe Met Glu Ser Ser Val Leu
           100
                                105
Leu Ala Met Ser Phe Asp Arg Tyr Ile Ala Ile Cys Asn Pro Leu Arg
                            120
                                                125
Tyr Ser Ser Ile Leu Thr Asn Asp Arg Ile Leu Lys Ile Gly Val Ala
                        135
                                            140
Ile Leu Cys Arg Ser Ser Met Leu Ile Pro Pro Val Ile Ile Arg Leu
                    150
                                        155
Lys Phe Leu Asn Tyr Cys Arg Pro His Phe Leu Ser His Ser Phe Cys
               165
                                    170
Leu His Gln Asp Leu Ile Arg Met Ala Cys Ser Asp Ile Arg Phe Asn
           180
                                185
                                                    190
Ser Phe Tyr Ala Leu Ser Leu Val Ile Cys Thr Leu Leu Leu Asp Ala
       195
                            200
                                                205
Val Leu Ile Leu Ala Ser Tyr Val Met Ile Leu His Thr Val Leu Ser
                        215
                                            220
Ile Ala Ser Arg Glu Glu Arg Ile Lys Ser Leu Gln Thr Cys Val Ser
                                        235
                    230
His Ile Ser Ala Val Leu Val Phe Tyr Ile Pro Ile Ile Gly Leu Thr
                                    250
                245
Met Val His Arg Phe Gly Lys His Leu Ser Pro Leu Val Gln Val Leu
           260
                                265
Met Gly Asn Ile Tyr Ile Leu Phe Pro Pro Leu Met Asn Pro Ile Ile
                            280
                                                285
Tyr Ser Ile Lys Thr Gln Gln Ile Arg Val Arg Ile Gln Arg Leu Phe
                        295
Ser Leu Asn Gly Ile
305
<210> 2116
<211> 133
<212> PRT
<213> Mus musculus
<400> 2116
Met Ser Val Phe Leu Met Ser Asn Leu Ser Thr Ser Arg Phe Val Leu
                                    10
Thr Gly Phe Pro Gly Leu Glu Val Tyr Tyr Ile Leu Phe Ala Ile Pro
                                25
Phe Ser Val Met Tyr Ala Met Val Phe Pro Gly Asn Cys Met Thr Leu
                                                45
                            40
His Val Ile Gln Thr Asp Pro Ser Leu His Gln Pro Met Phe Tyr Phe
                        55
Leu Gly Met Leu Ala Leu Thr Asp Leu Cys Met Gly Leu Ser Thr Val
Asn Met Val Leu Gly Ile Leu Gly Asp Phe Leu Gln Glu Ile Ser Leu
Asp Ala Cys Ile Tyr Tyr Ser Lys Gly Asn Gly Cys Gln Lys Phe Val
                                105
```

25

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115
Leu Phe Leu Arg Asn
   130
<210> 2117
<211> 230
<212> PRT
<213> Mus musculus
<400> 2117
Gln Val Leu Leu Ile Phe Trp Phe Asn Met Lys Pro Ile Ser Phe Val
Gly Cys Phe Leu Gln Met Phe Val Met Asn Thr Phe Leu Pro Met Glu
           20
                                25
Ser Ser Thr Phe Leu Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                            40
His Pro Leu Arg Tyr Pro Ser Ile Ile Thr Glu Gln Phe Val Ile Asn
                        55
Ala Ala Ile Phe Ile Val Ala Arg Asn Leu Leu Ala Thr Leu Pro Thr
                    70
                                        75
Pro Val Leu Ala Ala Arg Leu Asn Tyr Cys Ala Ser Asn Val Val Glu
                                    90
               85
Asn Cys Ile Cys Ala Asn Ile Ser Val Ala Lys Leu Ser Cys Gly Asp
                                                    110
           100
                                105
Ile Arg Leu Asn Lys Leu Tyr Gln Phe Val Ser Val Trp Cys Leu Leu
                                                125
       115
                            120
Gly Ser Asp Leu Val Leu Ile Leu Leu Ser Tyr Cys Phe Ile Leu Arg
                        135
                                            140
Val Val Met Cys Gln Gln Ser Gly Gly Thr Val Thr Lys Ala Leu Ser
                                        155
                   150
Thr Cys Gly Ser His Leu Ile Leu Ile Leu Phe Phe Ser Thr Leu Leu
                                    170
               165
                                                        175
Leu Val Phe Ile Phe Thr Asn Lys Ala Gly Lys Lys Ile Pro Ser Glu
           180
                                185
                                                    190
Val Pro Ile Leu Leu Asn Val Leu His His Leu Ile Pro Pro Ala Leu
                           200
                                                205
Asn Pro Ile Val Tyr Gly Val Arg Thr Gln Glu Ile Lys Gln Gly Ile
                        215
Ile Lys Leu Phe Lys His
<210> 2118
<211> 312
<212> PRT
<213> Mus musculus
<400> 2118
Met Ile Lys Asn Asn Gln Thr Leu Phe Ser Gln Phe Leu Leu Gly
                                    10
Leu Pro Ile Pro Ala Glu His Gln Gln Leu Phe Phe Ala Leu Phe Leu
                                25
Leu Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile Ile Leu
                            40
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
```

Phe Val Asn Ile Asn Phe Lys Pro Tyr Val Ser Val Cys Lys Arg Asn

```
70
Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Ser Ile Thr Tyr Ala Gly
                85
                                    90
Cys Leu Thr Gln Met Tyr Phe Phe Val Ile Leu Phe Gly Gly Leu Glu
                                105
                                                    110
Ile Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys
                            120
Leu Pro Leu His Tyr Thr Ser Ile Met Ser Leu Lys Phe Cys Val Cys
Ala Val Leu Ile Ser Trp Val Phe Asn Leu Leu Tyr Ser Met Leu His
                    150
Thr Leu Leu Leu Ala Arg Leu Ser Phe Cys Glu Asp Asn Ile Ile Cys
                                    170
His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp
                                                    190
            180
                                185
Ile Tyr Ile Asn Glu Leu Met Ile Phe Ile Leu Gly Gly Pro Leu Val
                                                205
        195
                            200
Val Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Val Gln Ile Ile Phe
                        215
Ser Ile Leu Lys Ala Ser Ser Thr Arg Ala Ile Tyr Lys Val Phe Ser
                    230
                                        235
Thr Cys Gly Ser Tyr Leu Thr Val Val Ser Leu Phe Tyr Gly Thr Val
                245
                                    250
Ile Gly Leu Tyr Phe Cys Pro Ser Glu Asn Asn Phe Thr Ala Lys Glu
            260
                                265
Ala Ser Ile Thr Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro
                            280
Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Glu Ala Leu Ile Lys
                        295
Val Leu Ile Lys Lys Ile Pro Leu
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 2119

Met Ile Met Asn Asn Gln Thr Ala Ile Phe Gln Phe Leu Leu Gly Leu Pro Ile Pro Pro Asp Tyr Gln His Leu Phe Tyr Ala Leu Phe Leu Val Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu 40 Ile His Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys 70 75 Leu Leu Gln Asp Met Gln Ser Gln Val Pro Ser Ile Ser Tyr Gly Ala Cys Leu Thr Gln Ile Tyr Phe Phe Leu Val Phe Gly Asn Met Glu Ser 105 Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe 120 Pro Leu His Tyr Thr Ser Ile Met Ser Leu Lys Leu Cys Thr Cys Leu 140 Met Leu Leu Ser Trp Met Leu Thr Thr Ser His Ala Met Met His Thr 150

```
Leu Leu Ala Ala Arg Leu Ser Phe Cys Glu Asn Asn Val Val Leu Asn
                                    170
Phe Phe Cys Asp Leu Phe Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
                                185
Tyr Val Asn Glu Leu Met Ile Phe Leu Val Ser Gly Leu Leu Val Val
                            200
Ile Pro Phe Leu Leu Ile Val Ile Ser Tyr Ala Lys Ile Val Ser Ser
                                            220
Ile Leu Arg Val Pro Ser Thr Lys Gly Ile Tyr Lys Val Phe Ser Thr
                                        235
                    230
Cys Arg Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                                    250
Gly Leu Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr Leu Lys Glu Asn
                                265
                                                    270
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Val Arg Val
                        295
Val Cys Asn Lys Lys Ile Ser Leu Lys Trp
```

<210> 2120 <211> 318 <212> PRT

<213> Mus musculus

<400> 2120

Met Glu Leu Lys Asn Gln Thr Ala Val Ser Glu Phe His Leu Leu Gly Leu Thr Asp Asn His Arg Met Leu Pro Leu Val Phe Ile Met Phe Leu 25 Phe Met Tyr Leu Ile Thr Val Phe Gly Asn Leu Ile Ile Met Ala 40 Ile Ser Ser Gly Ser Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 Ile Leu Ser Ile Asn Asp Ile Cys Tyr Ser Thr Val Thr Ile Pro Lys 70 75 Met Leu Val Asn Ile Gln Ala His Asp Asp Ser Ile Ser Tyr Ile Glu 90 Cys Leu Ser Gln Ile Cys Phe Val Ser Ile Phe Gly Gly Met Glu Asn 105 100 Cys Phe Ser Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys 120 125 115 Lys Pro Leu Arg Tyr Thr Val Ile Met Asn Pro Ile Cys Cys Val Leu 135 140 Met Val Leu Phe Ser Leu Phe Phe Ser Ile Met Asp Ala Leu Leu His 150 155 Ser Leu Met Val Leu Arg Leu Ser Phe Cys Thr Asp Leu Glu Ile Pro 170 175 His Phe Phe Cys Glu Leu Ala Gln Ile Ile Lys Leu Ala Cys Ser Asp 180 185 190 Thr Phe Leu Asn Asn Phe Leu Ile Phe Val Ala Ala Phe Val Phe Gly 200 Gly Gly Pro Val Cys Gly Ile Ile Phe Ser Tyr Ile Tyr Ile Val Ser 215 Ser Val Leu Arg Met Pro Ser Ser Gly Gly Lys His Arg Ala Phe Ser 230 235 Thr Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Gly

```
245
                                    250
Phe Gly Val Tyr Ile Ser Ser Ala Val Thr Asp Ser Leu Arg Asn Thr
                                265
                                                    270
Ala Met Ala Ser Met Met Tyr Ser Val Val Pro Pro Leu Leu Asn Pro
                            280
                                                285
Phe Ile Tyr Ser Leu Arg Asn Arg Glu Met Lys Glu Ala Leu Arg Lys
                        295
Leu Val Gly Arg Leu Ile Tyr Leu Ile Cys Ile Met Cys Tyr
                    310
<210> 2121
<211> 309
<212> PRT
<213> Mus musculus
<400> 2121
Met Asp Ser Val Asn Val Ser Leu Val Ala Glu Phe Ile Leu Val Gly
1
Leu Thr Asp Lys Pro Tyr Leu Gln Ile Pro Leu Phe Phe Val Phe Leu
            20
                                25
Ala Met Tyr Leu Val Thr Ala Leu Gly Asn Leu Ser Leu Ile Ile Leu
        35
                            40
Thr Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
                        55
Asn Leu Ser Phe Val Asp Leu Cys Tyr Ser Ser Val Phe Thr Pro Gln
                    70
                                        75
Met Leu Met Asn Phe Ile Arg Lys Asn Thr Thr Ser Tyr Met Glu Cys
                                    90
                85
Met Ala Gln Leu Tyr Phe Ser Cys Phe Phe Val Ile Ser Glu Cys Tyr
                                105
                                                     110
            100
Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
       115
                                                125
Leu Leu Tyr Asn Leu Val Met Ser Ser Lys Leu Cys Leu Asn Leu Met
                        135
                                            140
Leu Val Ser Tyr Phe Ile Ala Phe Ser Glu Ser Val Ala His Thr Ala
                    150
                                        155
Cys Met Leu Arg Leu Asn Phe Cys Asp Ala Asn Thr Ile Asn Tyr Tyr
                                    170
                                                         175
                165
Phe Cys Asp Ile Pro Pro Leu Leu Gln Leu Ser Cys Thr Thr Thr Arg
            180
                                185
                                                     190
Val Asn Glu Val Val Ile Phe Val Val Gly Ser Ile Asn Ile Ile Ile
                            200
                                                 205
        195
Pro Thr Ser Thr Ile Phe Val Ser Tyr Gly Phe Ile Leu Ser Ser Ile
                        215
                                             220
Phe Arg Ile Ser Ser Ser Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                    230
                                        235
                                                             240
Ser Ser His Ile Ile Ala Ala Phe Leu Phe Phe Gly Ser Gly Ala Ile
                                    250
                245
Arg Tyr Phe Lys Pro Ser Ser Asp Gly Ser Met Asp Glu Gly Lys Ile
            260
                                265
Ser Ser Val Phe Tyr Thr Asn Val Ile Pro Met Ile Asn Pro Leu Leu
                            280
Tyr Ser Leu Arg Asn Lys Asp Ile Lys Val Ala Leu Arg Arg Thr Leu
Arg Lys Arg Asn Phe
```

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<210> 2122
<211> 313
<212> PRT
<213> Mus musculus
<400> 2122
Met Val Met Asn Asn Gln Thr Val Ile Ser Gln Leu Leu Leu Gly
Leu His Ile Pro Pro Asp His Gln His Gly Phe Tyr Thr Leu Phe Leu
           20
                                25
Ala Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile Thr Leu
                           40
Ile Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ile
                       55
                                           60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Val Pro Lys
                   70
                                       75
Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Ser Ile Ser Tyr Ala Gly
               85
                                    90
Cys Leu Thr Gln Met Tyr Phe Leu Met Val Phe Gly Asp Met Glu Ser
                               105
                                                   110
           100
Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                           120
       115
                                               125
Pro Leu His Tyr Thr Ser Thr Met Ser Pro Thr Val Leu Cys Val Cys
                       135
                                           140
Val Val Leu Leu Ser Trp Val Phe Thr Ile Met Tyr Ser Met Val His
                   150
                                       155
Thr Leu Leu Ser Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro
                                   170
               165
                                                       175
His Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp
           180
                               185
                                                   190
Ile Phe Ile Asn Glu Leu Met Ile Phe Ile Leu Gly Gly Pro Val Val
                           200
       195
                                               205
Ala Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Val Arg Ile Val Ser
                       215
                                           220
Ser Ile Leu Lys Val Ser Ser Ser Gln Gly Ile His Lys Ile Phe Ser
                   230
                                       235
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile
               245
                                   250
Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Lys
           260
                               265
                                                   270
Ile Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro
                           280
                                               285
Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Leu Ile Arg
                       295
                                           300
Val Leu Cys Lys Lys Ile Ser Leu
                    310
<210> 2123
<211> 323
<212> PRT
<213> Mus musculus
<400> 2123
Met Ala Arg Gly Asn Gln Thr Ser Thr Phe Glu Phe Leu Leu Trp Gly
Leu Ser Glu Gln Pro Gln Gln His Ile Leu Phe Leu Ile Phe Leu
Gly Met Tyr Leu Val Thr Val Ala Gly Asn Leu Leu Ile Val Leu Ala
```

```
40
Ile Ser Thr Asp Val Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
Ser Leu Ser Cys Asp Asp Ile Leu Leu Val Ser Thr Ile Val Pro Lys
                    70
Ala Leu Val Asn Ile His Thr Gln Ser Arg Thr Ile Ser Tyr Ala Gly
                                    90
Cys Leu Val Gln Leu Tyr Phe Phe Leu Thr Phe Gly Asp Met Asp Ile
                                105
            100
Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
       115
                            120
                                                125
Pro Leu His Tyr Arg Met Ile Met Ser Phe Gln Arg Cys Ser Leu Leu
                        135
                                            140
Val Thr Ala Cys Trp Thr Leu Thr Asn Leu Val Ala Met Thr His Thr
                    150
                                        155
Phe Leu Ile Phe Arg Leu Ser Phe Cys Ser Gln Lys Val Ile Pro Asp
                                    170
               165
Phe Phe Cys Asp Leu Gly Pro Leu Met Lys Ile Ala Cys Ser Glu Thr
            180
                                185
                                                    190
Arg Ile Asn Glu Leu Val Leu Leu Phe Leu Gly Gly Cys Ile Ile Leu
                            200
                                                205
        195
Ile Pro Leu Leu Leu Ile Leu Val Ser Tyr Ile Arg Ile Val Ser Ala
                        215
                                            220
Ile Ile Arg Val Pro Ser Ala Gln Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Ile Ser Val Val Ala Leu Phe Phe Gly Thr Val Ile
                245
                                    250
Arq Ala Tyr Leu Cys Pro Ser Ser Ser Ser Asn Ser Val Val Glu
                                265
            260
Asp Thr Ala Ala Val Val Met Tyr Thr Val Val Thr Pro Leu Leu Asn
                            280
                                                285
Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Val
                                            300
                        295
Arg Ile Leu Lys Gly Lys Val Ser Phe Ser Trp Ala Gln Gly Leu Leu
                    310
                                        315
Gln Arg Lys
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 2124

Met Glu Ser Trp Asn Ser Thr Leu Gly Gly Thr Phe Ile Leu Val Gly 1 5 10 Ile Leu Asp Asp Ser Gly Ser Pro Asp Leu Leu Cys Ala Val Ile Thr 2.0 25 Ala Leu Tyr Met Leu Ala Met Ile Ser Asn Gly Leu Leu Leu Val 35 40 45 Ile Thr Met Asp Ala Gln Leu His Val Pro Met Tyr Leu Leu Gly 60 55 Gln Leu Ser Leu Ile Asp Phe Phe Leu Thr Ser Ile Ile Ile Pro Lys 70 75 Ala Val Met Asp Phe Leu Leu Lys Asp Asn Thr Ile Ser Leu Glu Gly 8.5 90 Cys Ala Leu Gln Met Phe Leu Ala Leu Thr Leu Gly Gly Ala Glu Asp 105

```
Leu Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
Pro Leu Asn Tyr Met Ile Phe Met Arg Pro Ser Ile Cys Trp Leu Gly
                                            140
                        135
Val Ala Thr Ser Trp Ile Leu Gly Leu Leu Ser Ala Leu Gly Tyr Thr
                    150
Ile His Thr Met Gln Tyr Pro Phe Cys Lys Ser Arg Lys Ile Arg Asp
                                    170
                165
Leu Tyr Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr
                                185
Ser Lys Tyr Glu Leu Met Val Tyr Val Met Gly Val Ala Phe Leu Ile
                                                205
       195
                            200
Pro Pro Leu Ala Ala Ile Leu Ala Ser Tyr Ile Leu Ile Leu Phe Thr
                        215
Val Leu Asn Lys Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr
                    230
                                        235
Cys Phe Ser His Leu Thr Val Val Gly Leu Tyr Tyr Gly Ala Leu Thr
                                    250
Val Met Tyr Val Leu Pro Ser Ser Tyr Leu Ser Pro Lys Gln Glu Asn
                                265
Leu Leu Ser Val Phe Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Arg Arg Val
                        295
Leu Gly Lys Trp Phe Leu Pro Thr Gln Ser Thr Phe
                    310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 2125

Met Asn Asn Tyr Thr Thr Gln Ser Asp Phe Thr Leu Val Gly Phe Phe 10 Ser Gln Ser Lys His Pro Ala Leu Leu Ala Val Val Ile Phe Val Leu 20 25 Phe Leu Met Ala Leu Ser Gly Asn Ala Leu Leu Ile Leu Leu Ile Leu 40 Ser Asp Ile His Leu His Ile Pro Met Tyr Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Met Tyr Ile Ser Val Thr Val Pro Lys Met Leu 70 75 Met Asp Gln Val Leu Gly Ser His Lys Ile Ser Ala Ala Ala Cys Gly 90 95 Met Gln Met Phe Leu Tyr Val Thr Leu Ala Gly Ser Glu Cys Phe Leu 105 110 Leu Ala Ala Met Ser Tyr Asp Cys Tyr Val Ala Ile Cys His Pro Leu 120 125 Gln Tyr Pro Val Leu Met Asn His Arg Val Cys Leu Leu Leu Met Ser 130 135 140 Leu Cys Trp Val Leu Gly Ser Leu Asp Gly Phe Met Phe Thr Pro Val 150 155 Thr Met Thr Phe Pro Phe Cys Gly Ser Arg Glu Ile His His Phe Phe 170 165 175 Cys Glu Val Pro Ala Val Thr Lys Leu Ser Cys Ser Asp Thr Trp Leu 185 Tyr Glu Thr Leu Met Tyr Val Cys Cys Val Leu Met Leu Leu Ile Pro

```
200
Val Thr Val Ile Ser Gly Ser Tyr Thr Ser Ile Leu Leu Thr Val Leu
                        215
                                            220
Arg Met Asn Ser Ala Glu Gly Arg Lys Lys Ala Leu Ala Thr Cys Ser
                    230
                                        235
Ser His Met Thr Val Val Thr Leu Phe Tyr Gly Ala Ala Val Tyr Thr
                                    250
Tyr Met Leu Pro Ala Ser Leu His Thr Pro Glu Lys Asp Val Val Ala
            260
                                265
Ser Val Phe Tyr Thr Ile Val Thr Pro Leu Leu Asn Pro Leu Ile Tyr
                            280
Ser Phe Arg Asn Lys Asn Val Thr Glu Ala Val Lys Lys Leu Leu Gly
                                             300
Val Ser Thr Leu Phe Gln Glu Thr Val Lys
                    310
<210> 2126
<211> 317
<212> PRT
<213> Mus musculus
<400> 2126
Met Glu Lys Thr Asn His Ser Leu Thr Thr Gln Phe Ile Leu Val Gly
                 5
                                    10
Phe Ser Asp His Pro Asp Leu Lys Thr Pro Leu Phe Leu Leu Phe Ser
Val Ile Tyr Leu Val Thr Met Val Gly Asn Leu Gly Leu Val Ala Val
                            40
Ile Tyr Leu Glu Pro Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly
                        55
Asn Leu Ala Leu Met Asp Ser Cys Cys Ser Cys Ala Ile Thr Pro Lys
                    70
                                         75
Ile Leu Glu Asn Phe Phe Ser Val Asp Arg Ile Ser Leu Tyr Glu
                                    90
Cys Met Ala Gln Phe Tyr Phe Leu Cys Leu Ala Glu Thr Ala Asp Cys
                                105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Gln Tyr His Ser Met Met Ser Lys Lys Leu Ser Ile Gln Met
                        135
                                            140
Ser Ile Gly Thr Phe Ile Thr Ser Asn Leu His Ser Leu Ile His Val
                    150
                                         155
Gly Cys Leu Leu Arg Leu Thr Phe Cys Lys Ser Asn Arg Ile Asp His
                                    170
Phe Phe Cys Asp Ile Leu Pro Leu Tyr Arg Leu Ser Cys Thr Asp Pro
            180
                                185
                                                     190
Phe Ile Asn Glu Leu Met Ile Tyr Ile Phe Ser Met Pro Ile Gln Val
                            200
                                                 205
Phe Thr Ile Thr Thr Val Leu Val Ser Tyr Phe Cys Ile Leu Leu Thr
                        215
                                             220
Ile Phe Lys Met Lys Ser Lys Asp Gly Arg Gly Lys Ala Phe Ser Thr
                                        235
                    230
Cys Ala Ser His Phe Phe Ser Val Ser Ile Phe Tyr Val Cys Leu Leu
                245
                                    250
Met Tyr Ile Arg Pro Phe Asp Glu Gly Asn Lys Asp Ile Pro Val Ala
            260
                                265
Val Phe Tyr Thr Ile Ile Ile Pro Leu Leu Asn Pro Phe Ile Tyr Ser
                                                 285
        275
                            280
```

```
290
                        295
                                             300
His Ser Ile Phe Lys Asn Ala Ser Ala Ser Met Ala Arg
                    310
<210> 2127
<211> 311
<212> PRT
<213> Mus musculus
<400> 2127
Met Gln Asn Gln Ser Phe Val Thr Glu Phe Ile Leu Leu Gly Leu Ser
                                    10
Gln Asn Pro Lys Val Glu Lys Ile Leu Phe Val Val Phe Leu Leu Val
            20
                                25
Tyr Ile Ala Thr Ile Gly Gly Asn Met Ile Ile Val Val Thr Ile Ile
                            40
Tyr Ser Pro Ala Leu Leu Ser Ser Pro Met Tyr Phe Phe Leu Ile Phe
                        55
Leu Ser Phe Leu Asp Ala Cys Thr Ser Ser Thr Val Thr Pro Lys Met
                    70
                                        75
Ile Val Asp Phe Phe Tyr Glu Arg Lys Thr Ile Ser Phe Glu Cys Cys
                                    90
                                                         95
Ile Thr Gln Leu Phe Thr Ser His Phe Phe Ala Gly Val Glu Val Ile
                                105
Ile Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
Leu His Tyr Ser Ser Ile Met Thr Arg Arg Leu Cys Gly Thr Leu Val
                        135
                                             140
Met Val Ala Trp Thr Gly Gly Phe Leu His Ser Ile Thr Gln Val Ile
                    150
                                        155
Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Phe Ile Asp His Phe
                165
                                    170
Ile Cys Asp Leu Phe Pro Leu Leu Gln Leu Ala Cys Thr Asp Thr His
            180
                                185
                                                     190
Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Phe Cys Ile Ile
        195
                            200
                                                 205
Ile Phe Ser Leu Leu Ile Val Ser Tyr Gly Val Ile Leu Phe Ser Leu
                        215
                                             220
Arg Gly His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly
                    230
                                        235
Ser His Ile Thr Val Met Ile Leu Phe Phe Val Pro Cys Met Leu Ile
                245
                                    250
Tyr Ala Arg Pro Ser Ser Ala Phe Ser Phe Glu Lys Asn Thr Leu Ile
            260
                                265
Phe Ala Ser Val Leu Thr Pro Leu Phe Asn Pro Met Val Tyr Thr Phe
                            280
                                                285
Arg Asn Lys Glu Met Lys Asn Ala Ile Arg Lys Met Cys Arg Lys Leu
                        295
                                            300
Leu Val Asp Ser Asp Asn Phe
                    310
<210> 2128
<211> 201
<212> PRT
<213> Mus musculus
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Leu Arg Asn Lys Glu Val Val Asn Ala Val Lys Lys Val Met Lys Thr

```
<400> 2128
Leu Gly Leu Ser Ala Asp Pro Glu Leu Gln Pro Ile Ile Phe Gly Leu
Phe Leu Phe Met Tyr Leu Val Thr Phe Leu Gly Asn Leu Ile Ile Thr
Leu Thr Ile Ser Ala Glu Cys His Leu His Thr Pro Met Tyr Phe Phe
Leu Ser Asn Leu Ser Val Ala Asp Ile Cys Ile Ser Ser Thr Thr Val
Pro Lys Met Leu Leu Asn Ile Gln Thr Gln Asp His Arg Ile Thr Tyr
                                         75
Ser Gly Cys Leu Thr Gln Ala Cys Phe Val Leu Leu Phe Ala Gly Leu
Glu Asn Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile
                                105
Cys His Pro Leu Arg Tyr Thr Val Ile Met Asn Ser Cys Phe Cys Ser
                            120
                                                125
Ile Leu Ile Val Val Ser Leu Ala Ile Ser Ala Val Asn Ala Leu Leu
                        135
                                            140
Leu Ser Leu Met Val Leu His Leu Asn Phe Cys Thr Lys Val Glu Ile
                    150
                                        155
Pro His Phe Phe Cys Glu Leu Ala Gln Ile Ile Lys Leu Ala Cys Ser
                                    170
                165
                                                         175
Asp Thr Leu Ile Asn Asn Ile Leu Ile Tyr Ile Ser Ala Phe Met Phe
                                185
Gly Gly Ile Pro Phe Phe Gly Ile Phe
<210> 2129
<211> 317
<212> PRT
<213> Mus musculus
<400> 2129
Met Val Ser Leu Asn His Thr Gln Phe His Pro Tyr Phe Leu Leu Leu
1
Leu Leu Gly Ile Pro Gly Leu Glu Asp Thr His Leu Trp Ile Gly Phe
                                25
Pro Phe Cys Val Val Val Val Tyr Leu Thr Ala Leu Leu Gly Asn
        35
Ile Thr Ile Ile Ser Val Ile Gln Thr Glu His Ser Leu His Gln Pro
                        55
Met Phe Tyr Phe Leu Ser Ile Leu Ser Ser Ile Val Leu Gly Leu Ser
                    70
                                        75
Thr Ser Thr Ile Pro Glu Met Leu Arg Thr Phe Trp Leu Asn Phe Lys
                                    90
Lys Ile Leu Phe Asp Gly Gly Val Ile Gln Met Phe Phe Ile His Leu
            100
                                105
```

Phe Ile Gly Met Glu Ser Ala Val Leu Leu Ala Met Ala Tyr Asp Arg

Lys Val Val Phe Ile Asn Ala Cys Leu Val Leu Leu Arg Pro Leu Val

Thr Ala Ile Pro Phe Ile Val Leu Ile Gln Arg Leu Pro Phe Cys Gly

His Gln Val Ile Leu His Thr Tyr Cys Glu His Met Gly Ile Thr Leu

185

140

175

190

155

170

120 Tyr Val Ala Ile Cys Asn Pro Leu His Tyr Thr Leu Val Leu Thr Asn

135

150

165

180

115

```
Leu Pro Cys Ala Ser Ile Lys Val Asn Ile Ile Tyr Gly Leu Cys Ala
        195
                            200
Ile Ser Thr Leu Val Phe Asp Ile Val Ala Ile Ile Val Ser Tyr Ile
                        215
Ile Gln Val Leu His Ala Val Ser His Leu Pro Ser Arg Asp Ala Arg
                    230
Leu Lys Ala Leu Ser Thr Cys Gly Ser His Val Cys Val Ile Leu Ser
                                    250
Phe Cys Thr Pro Ala Phe Phe Ser Phe Met Ile Asn Gln Phe Glu Arg
Asn Val Pro Arg Tyr Ile His Ile Leu Leu Ala Asn Leu Tyr Val Val
                            280
Ile Pro Pro Ala Leu Asn Pro Val Ile Tyr Gly Val Arg Thr Lys Lys
                        295
Ile Arg Glu Arg Val Ala Met Ala Ile Arg Asn Lys Leu
                    310
<210> 2130
<211> 162
<212> PRT
<213> Mus musculus
<400> 2130
Met Asn Trp Ile Leu His Thr Thr Met Val Ser Pro Asn Gln Thr Val
Val Thr Glu Phe Val Leu Gln Gly Phe Ser Glu His Pro Ser Leu Arg
Leu Phe Leu Met Gly Cys Phe Leu Ser Leu Tyr Thr Val Ala Leu Met
Gly Asn Met Val Ile Ile Ala Leu Ile Thr Ser Ser Thr Gly Leu His
                        55
Ser Pro Met Tyr Phe Phe Leu Cys Asn Leu Ala Thr Met Asp Ile Ile
                    70
Cys Thr Ser Ser Val Leu Pro Lys Ala Leu Val Gly Leu Leu Tyr Glu
                                    90
Glu Asn Thr Ile Ser Phe Lys Gly Cys Met Ala Gln Leu Phe Phe Leu
            100
                                105
```

 Leu Trp Ser Gly Ser Ser Glu Val Leu Leu Leu Thr Val Met Ala Tyr

 115
 120

 Asp Arg Tyr Val Ala Ile Cys Cys Pro Leu His Tyr Ser Ser Arg Met

 130
 135

 Ser Pro Gln Leu Cys Ala Ala Thr Gly Arg Gly Cys Met Val His Leu

 145
 150

Cys Cys

<210> 2131 <211> 263 <212> PRT

<213> Mus musculus

<400> 2131

Leu Leu Pro Leu Pro Leu Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu 1 5 5 10 10 15 Leu Ile Ile Val Leu Ile His Ser Asp Pro Arg Leu His Thr Pro Met 20 25 30 Tyr Phe Phe Leu Arg Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Thr

```
40
        35
Thr Thr Val Pro Gln Val Leu Val His Phe Leu Val Lys Arg Lys Thr
Ile Ser Phe Ala Gly Cys Ser Thr Gln Ile Val Val Leu Leu Val
                                        75
Gly Cys Thr Glu Cys Ala Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr
               85
                                    90
Val Ala Val Cys Lys Pro Leu His Tyr Ser Thr Ile Met Thr His Trp
                                105
           100
Val Cys Val Gln Leu Ala Ala Gly Ser Trp Ala Ser Gly Ala Leu Val
       115
                            120
                                                125
Ser Leu Val Asp Thr Thr Phe Thr Leu Arg Leu Pro Tyr Arg Gly Asn
                        135
                                            140
Asn Val Ile Asn His Phe Phe Cys Glu Pro Pro Ala Leu Leu Lys Leu
                    150
                                        155
Ala Ser Ala Asp Thr Tyr Ser Thr Glu Met Ala Ile Phe Ala Met Gly
                                    170
               165
Val Val Ile Leu Leu Ala Pro Val Ser Leu Ile Leu Thr Ser Tyr Trp
           180
                                185
                                                    190
Asn Ile Val Ser Thr Val Ile Gln Met Gln Ser Gly Glu Gly Arg Leu
       195
                            200
Lys Val Phe Ser Thr Cys Gly Ser His Leu Ile Val Val Leu Phe
                        215
                                            220
Tyr Gly Ser Gly Ile Phe Ala Tyr Met Arg Pro Asn Ser Lys Ile Met
225
                   230
                                        235
Asn Glu Lys Asp Lys Met Ile Ser Val Phe Tyr Ser Ala Val Thr Pro
               245
                                    250
Met Leu Asn Pro Ile Ile Tyr
           260
```

<210> 2132 <211> 289 <212> PRT

<213> Mus musculus

<400> 2132 Leu Gln Phe Trp Leu Gly Leu Pro Phe Gly Thr Ala Tyr Leu Ile Ala Val Leu Gly Asn Val Ile Ile Leu Phe Val Ile Tyr Leu Glu His Ser Leu His Gln Pro Met Phe Tyr Leu Leu Ala Ile Leu Ser Ala Thr Asp Leu Gly Leu Phe Thr Ala Thr Val Pro Arg Ala Leu Gly Ile Tyr Trp Phe Gly Phe His Lys Ile Ala Ser Arg Asn Cys Ala Gln Met Phe Phe Met His Leu Phe Thr Gly Met Glu Thr Phe Ile Leu Val Ala Met Ala 8.5 Phe Asp Cys Tyr Ile Ala Ile Cys Asn Pro Leu Tyr Asn Thr Ile Leu Thr Thr Arg Met Ile Cys Ile Ile Ala Gly Val Gly Leu Leu Arg Asn Phe Ile Leu Val Phe Pro Leu Ile Phe Leu Ile Leu Arg Arg Ser Phe Cys Glu His Asn Ile Ile Leu His Thr Tyr Cys Glu Arg Met Gly Ile Ala Arg Leu Ala Cys Ile Ser Ile Lys Val Asn Val Leu Phe Gly Leu

Ile Leu Ile Tyr Met Ile Leu Leu Asp Val Ile Leu Ser Ala Leu Ser 180 Tyr Val Lys Ile Leu His Ala Val Phe Lys Leu Pro Ser Trp Glu Ala 195 Arg Leu Lys Ala Leu Asn Thr Cys Gly Ser His Val Cys Met Ile Leu 215 Ala Phe Phe Thr Pro Ala Leu Phe Ser Phe Leu Ala His Arg Phe Gly 230 235 His Asn Ile Pro Arg Tyr Ile His Ile Leu Leu Ala Asn Leu Tyr Ile 245 250 Ile Ile Pro Leu Val Leu Asn Pro Ile Ile Tyr Gly Met Arg Thr Lys 265 Gln Ile Gln Asp Arg Pro Val Thr Ile Leu Phe Ser Lys Glu Val Leu 280 Leu

<210> 2133

<211> 305 <212> PRT

<213> Mus musculus

<400> 2133

Val Met Tyr Ile Leu Phe Phe Cys Arg Lys Leu Gln Asp Gly Ser Leu 10 Leu Tyr Phe Phe Pro Leu Leu Phe Ile Tyr Thr Phe Ile Val Ile Gly 25 Asn Leu Leu Ile Phe Phe Ala Val Arg Leu Asp Ser His Leu His Asn 40 Pro Met Tyr Asn Phe Ile Ser Ile Phe Ser Phe Leu Glu Ile Trp Tyr 55 Thr Thr Ala Thr Ile Pro Lys Met Leu Ser Asn Leu Ile Asn Glu Lys 70 75 Lys Ser Ile Thr Ile Thr Gly Cys Leu Leu Gln Met Tyr Phe Phe His 90 Ser Leu Gly Asn Ser Glu Gly Ile Leu Leu Ile Ser Met Ala Val Asp 100 105 Arg Tyr Ile Ala Ile Cys Asn Pro Leu Arg Tyr Gln Met Thr Met Thr 120 125 Pro Ser Leu Cys Val Gln Leu Ser Ala Gly Ser Cys Ile Phe Gly Phe 135 140 Leu Ile Leu Leu Pro Glu Ser Val Met Ile Ser Thr Leu Pro Phe Cys 150 155 Gly Pro Asn Gln Ile His Gln Ile Phe Asp Leu Val Pro Val Leu Ser 165 170 175 Leu Ala Cys Thr Asp Thr Ser Met Ile Val Ile Glu Asp Val Ile His 185 190 Ala Val Ala Ile Ile Ile Thr Phe Leu Thr Ile Ala Leu Ser Tyr Val 195 200 Arg Ile Val Ile Met Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys 215 220 Lys Ala Phe Ser Thr Cys Ala Gly His Leu Met Val Phe Leu Ile Phe 230 235 Phe Gly Ser Val Ser Leu Met His Leu Arg Phe Asn Ala Thr Tyr Pro 250 Pro Val Leu Glu Thr Ala Ile Ala Leu Met Phe Thr Val Leu Ala Pro Phe Phe Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Met Glu Asn

```
280
Ala Ile Lys Arg Leu Phe Cys Leu His Lys Val Leu Asn Thr Ser Glu
                        295
                                             300
Ser
305
<210> 2134
<211> 286
<212> PRT
<213> Mus musculus
<400> 2134
Trp Leu His Ser Thr Leu Phe Tyr Phe Thr Ser Asn Phe Leu Glu Ile
                                     10
Pro Gly Leu Glu Asn Met His Cys Trp Ile Gly Phe Pro Phe Phe Ala
            20
Val Leu Leu Thr Ala Val Leu Gly Asn Ile Thr Ile Val Cys Val Ile
                            40
Gln Thr Glu Tyr Ser Leu Pro Gln Pro Met Phe Tyr Phe Leu Ala Ile
                        55
Leu Ser Ser Thr Asp Leu Ser Ser His Leu Gln Ser Pro Gln Phe Leu
Glu Ser Cys Ser Arg Lys Asp Ile Ile Gln Met Phe Cys Ile Tyr Val
                                    90
Phe Ser Gly Met Glu Ser Ala Val Leu Val Ala Met Ala Tyr Asp His
            100
                                105
                                                     110
Phe Met Ala Asn Cys Cys Pro Leu His Tyr Thr Leu Val Leu Thr Asn
                            120
Lys Val Ile Phe Ile Ile Ser Trp Val Ile Leu Leu Arg Ser Leu Val
                        135
Phe Phe Ala Met Pro Phe Val Leu Leu Thr Leu Trp Leu Pro Phe Tyr
                    150
                                         155
Lys His Gln Ile Thr Leu His Leu His Gln Cys His Gln Ile Tyr Gly
                165
                                    170
                                                         175
Leu Cys Ala Thr Pro Ile Leu Ile Cys Asp Ile Val Ala Ile Ile Ile
            180
                                185
                                                     190
Ser Tyr Val Gln Ile Phe Ser Ala Ala Phe Gln Leu Ser Ser Gln Asp
        195
                            200
Ala Gln Leu Lys Ala Leu Gly Thr Cys Gly Ser His Ala Cys Cys His
                        215
                                             220
Leu Thr Phe Tyr Thr Leu Val Phe Phe Ser Phe Met Thr His Arg Phe
                    230
                                         235
Gly His Asn Ile Pro His Cys Ile His Ile Leu Val Ala Ser Val Tyr
                                    250
Val Val Ile Leu Pro Val Leu Asn Pro Leu Ile Tyr Ser Ile Arg Thr
                                265
Lys Trp Ile Ile Glu Gln Val Leu Lys Met Phe Cys Lys Lys
<210> 2135
<211> 317
<212> PRT
<213> Mus musculus
<400> 2135
Ser Ser Asn Thr Leu Asn Tyr Thr Asn Val Arg Asp Ile Trp Tyr Thr
                                    10
                                                         1.5
```

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Met Ile Gly Ile Pro Gly Leu Glu Glu Ser His Ile Trp Ile Ser Ile
Pro Ile Cys Ser Ile Tyr Ile Val Ala Ile Ala Gly Asn Ala Leu Leu
Leu Phe Leu Ile Ile Thr Glu Arg Ser Leu His Glu Pro Met Tyr Leu
Phe Leu Ser Met Leu Ala Leu Ala Asp Ile Leu Ser Thr Val Thr
                    70
Pro Lys Met Leu Ala Ile Phe Trp Phe Arg Ala Gly Gly Ile Ser Phe
                                    90
Ala Ser Cys Val Ser Gln Met Phe Phe Leu His Phe Ile Phe Val Ala
            100
                                105
Glu Ser Ala Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Val Ile
                            120
Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Thr Ser Val Ile Ile
                        135
Lys Met Gly Ile Ala Ala Val Ile Arg Ser Phe Phe Ile Cys Phe Pro
                    150
                                        155
Leu Ile Phe Leu Val Tyr Arg Leu Thr Tyr Cys Gly Arg Asn Ile Ile
                165
                                    170
Arg His Ser Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys Asp
            180
                                185
                                                    190
Ser Ile Lys Val Asn Ile Tyr Tyr Gly Met Ile Val Ala Leu Phe Ser
       195
                            200
Ile Cys Leu Asp Ala Val Leu Ile Ile Val Ser Tyr Ala Leu Ile Leu
                        215
                                            220
Cys Ala Val Phe Arg Ile Pro Ser Arg Asp Ala Arg Leu Lys Ala Leu
                    230
                                        235
Gly Thr Cys Gly Ser His Val Cys Val Ile Leu Leu Phe Tyr Thr Pro
                245
                                    250
Ala Phe Phe Ser Phe Phe Ala His Arg Phe Gly Gly His Ser Ile Pro
                                265
                                                    270
Leu His Val His Ile Leu Leu Ala Asn Leu Tyr Val Val Val Pro Pro
                            280
Ser Val Asn Pro Ile Ile Tyr Gly Val Arg Thr Lys Gln Ile Gln Glu
                        295
                                            300
Arg Ile Ile Gln Met Phe Ser Leu Gly Lys Ser Phe Cys
```

```
<210> 2136
```

<400> 2136

 Met
 Leu
 His
 Met
 Gln
 Asp
 Asn
 Thr
 Glu
 Phe
 Leu
 Ser
 Asn
 Thr
 Glu
 Phe
 Leu
 Ser
 10
 15
 15

 Gln
 Leu
 Pro
 Thr
 Gly
 Ile
 Pro
 Gly
 Leu
 Gly
 Leu
 Gly
 Leu
 Gly
 Leu
 Gly
 Leu
 Thr
 Ala
 Thr
 Ala
 Leu
 Ala
 Ala
 Ala
 Leu
 Ala
 Ala
 Ala
 Leu
 Ala
 Ala

<211> 245

<212> PRT

<213> Mus musculus

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100
                                105
Leu His Gly Phe Thr Phe Ile Glu Ser Gly Val Leu Val Ala Met Ala
                            120
Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Thr Met Ile
                        135
                                            140
Leu Thr Asn Ser Arg Ile Ile Gln Met Gly Phe Leu Val Ile Met Arg
                    150
                                        155
Ala Leu Leu Leu Ile Val Pro Leu Leu Leu Leu Lys Pro Val Ser
                165
                                    170
Phe Cys Lys Arg Asn Thr Leu Ser His Ser Tyr Cys Tyr His Pro Asp
            180
                                185
Val Ile Lys Leu Ala Cys Ser Asp Thr Arg Ala Asn Ser Ile Cys Gly
        195
                            200
Leu Val Asp Leu Ile Leu Thr Thr Gly Ile Asp Thr Pro Cys Ile Val
                        215
Leu Ser Tyr Ile Leu Ile Ile Arg Ser Val Leu Ser Ile Ala Ser Leu
                    230
Lys Lys Gly Thr Arg
<210> 2137
<211> 247
<212> PRT
<213> Mus musculus
<400> 2137
Met Glu Cys Lys Arg Asn Val Ser Glu Phe Leu Leu Met Gly Leu Ser
                                    10
Ser Ser Gln Asn Thr Glu Val Phe Cys Phe Ile Phe Phe Leu Phe Cys
                                25
Tyr Phe Thr Ile Leu Ser Trp Asn Leu Leu Ile Leu Phe Ser Ile Arg
                                                45
                            40
Cys Ser Ser Leu Phe Asn Gln Pro Met Tyr Tyr Phe Leu Ser His Leu
                        55
Ala Ser Met Asp Ile Cys Tyr Thr Ser Cys Val Thr Pro Lys Leu Ile
                    70
                                        75
Gly Asp Leu Leu Ala Glu Arg Lys Thr Ile Ser Tyr Thr Asp Cys Met
Leu Gln Val Phe Ala Met His Phe Phe Gly Met Ile Glu Thr Leu Ile
            100
                                105
                                                    110
Leu Thr Val Met Ala Phe Asp Arg Cys Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Met Val Ile Met Ser Arg Asn Arg Cys His Val Phe Ile Trp
                                            140
Ala Ser Trp Val Gly Gly Val Ala His Ser Phe Pro Gln Val Met Met
                    150
                                        155
Leu Val Cys Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp His Tyr Tyr
                165
                                    170
Cys Asp Val Phe Pro Leu Leu Lys Val Ala Cys Thr Asp Thr Tyr Ile
```

Asn Tyr Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser

215

190

220

His Ile Ser Val Val Ile Leu

```
<211> 219
<212> PRT
<213> Mus musculus
<400> 2138
Ser Ile Ser Ile Met Gly Cys Met Leu Gln Leu Leu Ala Tyr Gly Thr
                                    10
Phe Ala Thr Ile Asp Ser Phe Ile Leu Ala Ala Met Ala Val Asp Arg
                                25
Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Pro Ile Val Met Ser Gln
                            40
Arq Leu Cys Ile Leu Leu Val Gly Ser Tyr Thr Met Gly Phe Leu
                        55
Asn Ala Ser Val Asn Thr Ser Phe Thr Phe Ser Leu Lys Phe Cys Lys
                    70
                                        75
Ser Asn Ala Ile Asn His Phe Phe Cys Asp Glu Pro Pro Ile Leu Ala
               85
                                    90
Leu Ser Cys Ser Ser Ile Asp Phe Ser Ile Met Leu Leu Thr Val Phe
            100
                                105
                                                    110
Val Gly Phe Asn Leu Val Ser Thr Val Leu Val Val Ile Phe Ser Tyr
                            120
                                                125
        115
Thr Tyr Val Leu Ser Ala Ile Leu Arg Met Ser Ser Ala Ala Gly Arg
   130
                        135
                                            140
Lys Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Ala Val Thr Ile
                    150
                                        155
Phe Tyr Gly Thr Leu Ala Tyr Met Tyr Leu His Pro His Thr Asn Asp
               165
                                    170
Ser Gln Glu Gln Glu Lys Ala Ala Ser Val Phe Tyr Gly Ile Ile Ile
            180
                                185
                                                    190
Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Gln Asp Val Ile
       195
                            200
Glu Ala Phe Lys Lys Ile Val Lys Lys Cys Leu
    210
                        215
<210> 2139
<211> 312
<212> PRT
<213> Mus musculus
<400> 2139
Met Ala Glu Gly Asn Gln Ser Thr Val Thr Glu Phe Ile Leu Thr Gly
                                    10
Leu Thr Asn Lys Pro Glu Leu Gln Leu Pro Leu Phe Leu Leu Phe Leu
            20
                                25
Gly Ile Tyr Leu Phe Thr Glu Leu Gly Asn Leu Gly Met Val Ile Leu
        35
                                                45
                            40
Ile Ser Ile Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Ser Leu Ser Phe Ile Asp Leu Cys Tyr Ser Thr Val Ile Ile Pro Lys
                    70
                                        75
Met Leu Val Asn Phe Val Thr Glu Lys Asn Ile Ile Ser Tyr Pro Glu
                                    90
Cys Met Thr Gln Leu Tyr Cys Phe Leu Val Leu Val Ile Ser Glu Cys
Tyr Met Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
```

<210> 2138

```
115
                            120
Pro Leu Arg Tyr Asn Val Thr Met Ser Tyr Gln Val Cys Leu Trp Met
                        135
                                            140
Ile Gly Gly Val Tyr Cys Ile Gly Leu Ile Glu Ala Thr Leu His Ile
                    150
                                        155
Val Cys Met Leu Arg Val Leu Phe Cys Lys Ala Asn Val Val Asn His
                165
                                    170
Phe Phe Cys Asp Leu Leu Pro Leu Leu Gln Leu Ala Cys Ser Ser Thr
            180
                                                    190
Phe Val Asn Glu Val Val Leu Leu Cys Leu Ser Thr Phe Asn Phe Cys
                            200
Val Pro Met Leu Thr Ile Leu Ser Ser Tyr Ser Phe Ile Ile Ala Ser
                        215
Ile Leu Arg Ile Lys Ser Thr Glu Ser Arg Phe Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Phe Thr Ser Val Ala Val Phe Phe Gly Ser Leu Gly
                                    250
Phe Met Tyr Phe Gln Pro Ser Ser Val Ser Ser Glu Asp Gln Gly Lys
                                265
Val Ser Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu Asn Pro Leu
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Asn Lys Leu
                        295
Leu Arg Lys Lys Thr Phe His Met
                    310
<210> 2140
<211> 287
<212> PRT
<213> Mus musculus
<400> 2140
Asn Pro Phe Leu Pro Asn Leu Leu Gly His Asp Val Cys Ala Gly
                5
                                    10
Ile Glu Thr Leu Thr Lys Thr Leu Leu Ile Arg Val Ser Ser Gln Leu
                                25
His His Pro Met Tyr Phe Phe Leu Ser Asn Leu Ala Ser Ile Asp Ile
                            40
Ala Tyr Ser Ser Val Thr Pro Asn Met Leu Ala Asn Phe Leu Val
                        55
Lys Gln Asn Thr Ile Ser Tyr Ile Gly Cys Ser Ile Gln Phe Gly Ser
                    70
                                        75
Thr Ala Phe Trp Gly Thr Val Glu Cys Phe Leu Leu Ala Val Met Ala
                85
                                    90
Tyr Asp Arg Phe Val Ala Ile Cys Asn Gln Leu Leu Tyr Ser Thr Lys
           100
                                105
Met Ser Thr Glu Ala Cys Ile Gln Leu Val Leu Gly Ser Tyr Ile Gly
                            120
                                                125
Gly Phe Leu Thr Ala Leu Ser Phe Ile Leu Ser Phe Phe Leu Phe Ile
                        135
                                            140
Phe Cys Gly Pro Asn Arg Ile Asn His Phe Phe Cys Asp Ala Pro Leu
                    150
                                        155
Val Glu Leu Ser Cys Ser Asp Val Ser Val Ser Val Leu Val Thr Ser
                                    170
Phe Phe Val Gly Leu Val Thr Val Ile Thr Val Phe Val Ile Ala Ile
                                185
                                                    190
Ser Tyr Ile Tyr Ile Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu
```

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Gly Ser His Arg Ala Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val 210

Thr Leu Phe Tyr Gly Thr Val Thr Phe Ile Tyr Val Ile Pro Lys Ser 230

Asn Tyr Ser Thr Asp Gln Lys Lys Val Val Ser Val Phe Tyr Thr Val 245

Val Ile Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Asn Gln 260

Ile Lys Gly Ala Leu Lys Arg Leu Leu Gly Lys Lys Ile Phe Ser 275

<210> 2141

<211> 89
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<210> 2141 <211> 89 <212> PRT <213> Mus musculus

<400> 2141

 Met
 Ser
 Ala
 Ser
 Leu
 Lys
 Asp
 Phe
 Asn
 Ser
 Ser
 Lys
 Phe
 Leu
 Val
 Ser

 Glu
 Phe
 Ile
 Leu
 Gly
 Phe
 Pro
 Gly
 Ile
 His
 Ser
 Trp
 Gln
 His
 Trp

 Glu
 Phe
 Leu
 Ile
 Leu
 Tyr
 Leu
 Ser
 Ala
 Ile
 Gly
 Thr
 Asp
 Pro
 Ser
 Leu
 Lys
 Gln
 Pro

 Val
 Leu
 Ile
 Leu
 Ile
 Ile

<210> 2142 <211> 318 <212> PRT <213> Mus musculus

<400> 2142

Leu Ala Phe Leu Glu Tyr Gly Asp His Thr Thr Val Lys Glu Cys Ile 10 Leu Leu Gly Leu Thr Asp Asp Pro Val Phe Arg Val Ile Leu Phe Ser 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Phe Gly Asn Leu Ser Thr Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe Phe Leu Ser His Leu Gly Ser Pro Asp Ile Gly Ala Ser Ser Val Thr 70 75 Pro Ile Met His Val Asn Phe Leu Val Asp Lys Asn Ile Ile Met Thr 90 85 Leu Gly Cys Asn Ile His Leu Gly Ser Gly Ala Phe Phe Gly Thr Val 100 105 110 Glu Cys Phe Val Leu Ala Ala Met Ala Tyr Asp Cys Phe Val Ala Ile 120 125 Cys Ser Ser Leu Leu Tyr Ser Asn Lys Met Ser Ser Gln Val Cys Val 135 140 Gln Leu Leu Val Val Thr Tyr Val Ser Ser Phe Leu Asn Thr Ser Cys 150 155 160 Phe Thr Leu Ser Phe Phe Ser Phe Tyr Phe Cys Gly Pro Asn Arg Ile

```
165
                                    170
Lys Leu Phe Phe Cys Asp Phe Thr Pro Leu Val Glu Leu Ser Thr Phe
                                185
                                                    190
            180
Asp Ser Val Ser Ile Leu Val Thr Ile Ser Gly Gly Thr Val Ile Val
                            200
                                                 205
       195
Ile Thr Val Phe Ile Ile Ala Val Ser Tyr Ile Tyr Ile Phe Ile Thr
                        215
Ile Leu Lys Met His Ser Thr Gly Cys Arg His Lys Ala Phe Phe Thr
                    230
                                        235
Cys Thr Ser His Leu Thr Thr Val Thr Leu Phe Tyr Gly Thr Val Thr
                                    250
Phe Ile Tyr Leu Met Pro Lys Ser Ser Tyr Ser Thr Asp Gln Asn Lys
                                265
Val Val Ser Val Phe Cys Ile Val Val Ile Pro Met Leu Asn Pro Leu
        275
                            280
                                                 285
Ile Tyr Ser Leu Arg Asn Asn Glu Ile Thr Asp Ala Leu Lys Arg His
                        295
                                            300
Ile Gly Arg Lys Thr Cys Ser Trp Arg Asn Leu Leu Cys Cys
                    310
<210> 2143
<211> 320
<212> PRT
<213> Mus musculus
<400> 2143
Gly Phe Leu Leu Asp Gly Asn His Thr Ala Val Thr Glu Phe Ile Leu
Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Val Ile Leu Phe Thr Ile
                                25
Ile Leu Cys Phe Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr Ile
        35
Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe Phe
                        55
Leu Ser His Leu Ala Ser Val Asp Ile Gly Tyr Ser Cys Thr Val Thr
                    70
                                        75
Pro Asn Met Leu Val Asn Phe Leu Leu Glu Arg Ser Thr Thr Ser Tyr
                85
                                    90
Thr Glu Cys Gly Ile Gln Leu Gly Ser Ala Asp Phe Ile Ala Pro Val
            100
                                105
Glu Cys Phe Leu Leu Ala Ala Met Ala Cys Asp Pro Phe Met Ala Val
                            120
Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys Val Gln
                        135
Leu Val Leu Gly Ser Tyr Val Gly Gly Phe Leu Ser Leu Ile Ile Met
                    150
                                        155
Ala Tyr Phe Phe Ser Phe Leu Phe Phe Gly Pro Asn Arg Ile Asn His
                                    170
Phe Phe Cys Asn Phe Asp Pro Leu Ala Glu Leu Ser Cys Ser Asp Val
            180
                                185
                                                     190
Ser Val Ser Ile Leu Ile Ser Phe Leu Ala Ala Ser Ile Ala Ile Ile
       195
                            200
                                                 205
Thr Gly Phe Val Ile Ala Phe Ser Tyr Ser Tyr Ile Leu Ile Thr Ile
   210
                        215
                                            220
Leu Lys Met His Ser Thr Lys Gly Arg His Lys Ala Phe Ser Thr Cys
                    230
                                        235
Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Glu Thr Ile Thr Phe
                                    250
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```
Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Gly Gln Asn Lys Val
                              265
Ala Ser Gln Phe Tyr Met Val Val Ile Pro Met Leu Asn Leu Leu Ile
                          280
Tyr Ser Leu Ser Asn Asn Glu Ile Lys Gly Ala Leu Lys Arg Gln Leu
                      295
Asp Met Lys Thr Phe Ser Tyr Asn Asn Leu Leu Phe Cys Thr Thr Ile
<210> 2144
<211> 336
<212> PRT
<213> Mus musculus
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<222> (205)...(236)
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<400> 2144
Met Ala Leu Ser Asn Ser Ser Trp Arg Gln Pro Gln Pro Phe Phe
1
Leu Val Gly Val Pro Gly Leu Glu Glu Ser Gln His Trp Ile Ala Leu
                              25
Pro Leu Gly Ile Leu Tyr Leu Phe Ala Leu Val Gly Asn Val Thr Ile
Ile Phe Ile Ile Trp Thr Asp Ser Ser Leu His Gln Pro Met Tyr Leu
                      55
Phe Leu Ala Met Leu Ala Ala Ile Asp Leu Val Leu Ala Ser Ser Thr
                  70
                                     75
Ala Pro Lys Ala Leu Thr Val Leu Leu Ala His Ala His Glu Ile Gly
                                  90
Tyr Ile Val Cys Leu Thr Gln Met Phe Phe Ile His Ala Phe Ser Ser
           100
                              105
                                                 110
Met Glu Ser Gly Ile Leu Val Ala Met Ala Leu Asp Arg Tyr Val Ala
                          120
                                             125
Ile Cys His Pro Leu Arg His Ser Thr Ile Leu His Pro Gly Ile Ile
                      135
                                         140
Gly Arg Ile Gly Leu Val Val Leu Val Arg Gly Leu Val Leu Leu Phe
                  150
                                     155
Pro Phe Pro Ile Leu Leu Gln Asn Val Val Phe Cys Arg Ala Thr Val
               165
                                 170
Ile Ser His Ala Tyr Cys Glu His Met Ala Val Val Lys Leu Ala Cys
           180
                              185
                                                 190
Ser Glu Thr Thr Val Asn Arg Ala Tyr Gly Leu Ser Xaa Xaa Xaa
                          200
220
230
Tyr Ala Leu Ile Leu Gln Ala Val Leu Lys Val Pro Gly Gly Glu Ala
               245
                                 250
                                                    255
Arg Leu Lys Ala Phe Ser Thr Cys Gly Ser His Val Cys Val Ile Leu
           260
                              265
                                                270
Ile Phe Tyr Val Pro Gly Met Phe Ser Phe Leu Thr His Arg Phe Gly
       275
                          280
                                             285
His His Val Pro His His Val His Val Leu Leu Ala Thr Leu Tyr Leu
   290
                                         300
```

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Leu Val Pro Pro Ala Leu Asn Pro Leu Val Tyr Gly Val Lys Thr Arg
                    310
Gln Ile Arg Gln Arg Val Leu Arg Val Phe Tyr Thr Lys Ala Ser Ile
<210> 2145
<211> 206
<212> PRT
<213> Mus musculus
<400> 2145
His Ile Phe Thr Ala Met Glu Thr Val Val Leu Val Ala Met Ala Phe
Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Ser Gln Ile Leu
Thr Asn Arg Thr Ile Gly Leu Ile Leu Val Val Phe Gly Val Asn
                            40
Phe Ile Leu Leu Ile Pro Leu Val Phe Leu Ile Leu Arg Leu Pro Phe
                        55
Cys Gly His His Ile Ile Pro His Thr Tyr Cys Glu His Met Gly Ile
                                        75
Ala Arg Leu Ala Cys Ala Asn Ile Lys Val Asn Met Ile Phe Gly Leu
               85
Ile Leu Ile Ser Met Val Leu Ala Asp Val Leu Leu Ile Ala Ile Ser
            100
                                105
                                                    110
Tyr Met Arg Ile Leu Arg Ala Val Phe Cys Leu Pro Ser Arg Asp Ala
                            120
       115
                                                125
Arg Leu Lys Ala Leu Asn Thr Cys Gly Ser His Ile Cys Val Ile Leu
                        135
                                            140
Ala Phe Phe Thr Pro Ala Phe Phe Ser Phe Met Thr His Arg Phe Gly
                    150
                                        155
Arg Asn Val Pro Ala Tyr Ile His Ile Leu Leu Ala Asn Leu Tyr Val
                                    170
                                                        175
               165
Val Val Pro Pro Ala Leu Asn Pro Val Ile Tyr Gly Val Arg Thr Lys
           180
                                185
                                                    190
Gln Ile Arg Asp Gln Val Leu Ser Ile Phe Trp Lys Lys Thr
<210> 2146
<211> 287
<212> PRT
<213> Mus musculus
<400> 2146
Met Ile Pro Gly Gln Asn Gln Ser Trp Val Ser Glu Phe Ile Leu Ile
                                    10
Gly Phe Ser Ser Asp Pro Thr Thr Asn Ser Ile Leu Phe Ile Val Phe
                                25
Leu Leu Ile Tyr Leu Ser Ser Val Leu Gly Asn Gly Leu Ile Ile Met
                            40
Leu Val Cys Leu Asp Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu
Ser Thr Leu Ser Leu Leu Asp Met Thr Phe Val Thr Thr Thr Met Pro
```

Gln Met Leu Val His Leu Leu Ala His Ser Gln Thr Ile Ser Phe Thr

Gly Cys Trp Leu Gln Met Phe Met Phe Gly Gly Leu Gly Ile Thr Glu

```
105
            100
Cys Thr Phe Phe Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
        115
                            120
Tyr Pro Leu Arg Tyr Thr Val Ile Leu Asn Trp Gly Leu Cys Ile Arg
                        135
                                            140
Leu Ala Ala Gly Ser Trp Ile Cys Gly Phe Phe Ser Ser Leu Leu His
                    150
                                        155
Thr Phe Phe Thr Met Ser Leu Pro Tyr Cys Gly Pro Asn Arg Val Asn
                                    170
His Tyr Leu Cys Glu Gly Pro Ser Val Arg Ser Leu Ala Cys Met Asp
            180
                                185
                                                    190
Thr His Ile Ile Glu Met Val Asp Leu Val Leu Ser Val Phe Leu Val
        195
                            200
                                                205
Val Thr Pro Ile Ser Leu Ile Val Ala Ser Tyr Ile Arg Ile Ala Met
                        215
Ala Ile Leu Lys Ile Lys Ser Thr Glu Gly Arg Cys Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ala Ser His Leu Thr Val Val Thr Phe Phe Tyr Ala Pro Ala
                                    250
Thr Tyr Thr Tyr Leu Arg Pro Asn Ser Ser Tyr Ser Pro Glu Arg Asp
            260
                                265
                                                    270
Lys Gln Ile Ser Leu Phe Tyr Ser Ala Phe Thr Pro Leu Leu Asn
                            280
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<210> 2147

<211> 192

<212> PRT

<213> Mus musculus

<400> 2147

Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Thr Val Ile Met 10 Asn Ser Cys Phe Cys Ser Ile Leu Ile Val Val Ser Leu Ala Ile Ser 20 25 Ala Val Asn Ala Leu Leu Leu Ser Leu Met Val Leu His Leu Asn Phe 40 Cys Thr Glu Val Glu Ile Pro His Phe Phe Cys Glu Leu Ala Gln Ile Ile Lys Leu Ala Cys Ser Asp Thr Leu Ile Asn Asn Ile Leu Ile Tyr 70 75 Ile Ser Ala Phe Met Phe Gly Gly Ile Pro Phe Phe Gly Ile Phe Leu 90 Ser Tyr Thr Glu Ile Val Ser Ser Val Leu Lys Ile Pro Ser Arg Gln Gly Arg His Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val Val 120 Ser Leu Phe Tyr Gly Thr Gly Leu Gly Val Tyr Ile Ser Ser Ala Val 135 140 Thr Glu Ser Pro Arq Lys Thr Ala Val Ala Ser Val Met Tyr Ser Ile 150 155 Val Thr Gln Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp 165 170 Met Lys Glu Ala Leu Arg Lys His Val Gly Arg Ile Ala Ser Ile Val 180 185

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<213> Mus musculus
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<222> (71)...(117)
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Gly Leu Phe Ser Ser Ser Lys Thr Ser Leu Thr Phe Phe Ser Phe Ile
                              25
Phe Phe Ile Phe Ile Met Ala Ile Thr Glu Asn Ala Leu Met Ile Leu
Leu Ile His Arg Asp Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu
                      55
Ser His Leu Ser Phe Met Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
65
100
                             105
Xaa Xaa Xaa Xaa Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His
                          120
                                            125
Pro Leu Arg Tyr Pro Val Leu Met Arg Asp Asn Ser Ser Arg Leu Leu
                      135
Ala Ala Gly Ser Trp Leu Val Gly Ile Leu Asn Ser Ile Val His Thr
                  150
                                     155
Val Phe Ala Leu His Phe Pro Phe Cys His Ser Arg Ala Ile Asp His
                                 170
                                                    175
              165
Phe Phe Cys Glu Val Pro Ala Met Leu Lys Leu Ser Cys Ile Asp Thr
          180
                             185
                                                190
Thr His Tyr Glu Arg Gly Val Tyr Val Ser Gly Ile Ile Phe Leu Leu
       195
                          200
                                            205
Ile Pro Phe Ser Met Ile Ser Ile Ser Tyr Val Gln Ile Leu Leu Thr
                      215
                                        220
Val Phe Gln Met Gln Ser Ser Gly Ala Arg Gln Lys Ser Phe Ser Thr
                  230
                                     235
Cys Ser Phe His Met Val Val Ile Met Tyr Tyr Gly Pro Phe Ile
              245
                                 250
Phe Thr Tyr Met Arg Pro Arg Ser Tyr His Thr Pro Gly Gln Asp Lys
                             265
Phe Leu Ala Ile Phe Tyr Thr Ile Leu Thr Pro Thr Leu Asn Pro Ile
                          280
                                            285
Ile Tyr Ser Phe Arg Asn Lys Asp Val Leu Met Ala Val Lys Asn Ile
                      295
Val Gln Ser Asn Phe Leu Asn Lys Lys
                  310
<210> 2149
<211> 135
<212> PRT
<213> Mus musculus
<400> 2149
Met Trp Met Phe Pro Lys Gln Asn Gln Ser Trp Val Ser Glu Phe Ile
                                 10
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<212> PRT

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Leu Leu Gly Phe Ser Ser Val Pro Thr Thr Asn Ser Ile Leu Phe Ile
Val Phe Leu Leu Val Tyr Leu Ser Ser Val Leu Gly Asn Gly Leu Ile
                            40
Ile Met Leu Val Cys Leu Asp Thr Gln Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Cys Thr Leu Ser Leu Leu Asp Met Ser Tyr Val Thr Thr
                    7.0
Met Pro Gln Met Leu Val His Leu Leu Ala His Ser Gln Thr Ile Ser
                85
                                    90
Phe Val Gly Cys Trp Leu Gln Met Tyr Met Phe Ser Ala Leu Gly Ile
            100
                                105
Ala Glu Ser Ile Leu Phe Val Val Met Ala Tyr Asp Arg Tyr Val Ala
        115
                            120
Ile Cys Tyr Pro Leu Arg Tyr
    130
<210> 2150
<211> 216
<212> PRT
<213> Mus musculus
<400> 2150
Cys Leu Ala Gln Met Phe Phe Ile His Ser Phe Thr Ala Met Glu Ser
1
Gly Phe Phe Leu Ala Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Asp
                                25
Pro Leu Arg His Thr Thr Ile Leu Thr Asn Ser Arg Ile Ala Lys Met
Gly Ala Val Val Leu Arg Gly Val Gly Phe Phe Ser Pro His Pro
                        55
Ile Leu Leu Lys Gln Leu Pro Tyr Cys Arg Thr Arg Ile Ile Ala His
                    70
                                        75
Thr Tyr Cys Glu Phe Ile Ala Val Lys Leu Ala Cys Val Asp Thr
                                    90
Gly Ala Thr Lys Arg Tyr Ser Leu Ser Val Ala Ser Val Ile Gly Ser
            100
                                105
Cys Asp Gly Phe Phe Ile Ala Leu Ser Tyr Val Leu Ile Leu Arg Ala
        115
                            120
Val Phe Arg Leu Pro Ser Arg Glu Ala Ser Leu Lys Ala Leu Gly Thr
                        135
Cys Gly Ser His Val Cys Val Ile Leu Val Phe Tyr Ser Thr Ala Val
                    150
                                        155
Phe Thr Phe Leu Thr His Arg Phe Gly His Asn Val Ala Pro Gln Ile
                165
                                    170
His Ile Phe Ile Ala Asn Met Tyr Leu Leu Val Pro Pro Phe Leu Asn
            180
                                185
Pro Ile Val Tyr Gly Ile Arg Thr Lys Lys Ile Arg Glu Tyr Val Leu
                            200
                                                205
Ser Phe Leu Arg Val Lys Phe Ser
    210
                        215
<210> 2151
<211> 311
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<212> PRT

<213> Mus musculus

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<400> 2151
Met Glu Asn Tyr Thr Arq Val Lys Glu Leu Ile Phe Leu Gly Leu Thr
                                    10
Gln Ser Gln Glu Val Ser Met Val Leu Phe Leu Phe Leu Leu Leu Val
                                25
Tyr Val Thr Thr Leu Leu Gly Asn Leu Leu Ile Met Val Thr Val Thr
Cys Glu Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg Asn Leu
Ser Val Ala Asp Ile Cys Phe Ser Ser Ile Thr Ala Pro Lys Val Leu
                    70
Val Asp Leu Leu Ser Asp Arg Lys Thr Ile Ser Phe Asn Gly Cys Leu
                                    90
Thr Gln Met Phe Phe His Leu Ile Gly Gly Val Asp Val Phe Ser
            100
                                105
Leu Ser Val Met Ala Leu Asp Arg Tyr Val Ala Ile Ser Lys Pro Leu
        115
                            120
His Tyr Val Thr Ile Met Ser Arg Gly Arg Cys Ile Gly Leu Ile Val
                        135
Ala Ser Trp Val Gly Gly Phe Ala His Ser Ile Val Gln Ile Ser Leu
                    150
                                        155
Leu Leu Thr Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Thr Phe Tyr
                                    170
                165
Cys Asp Val Pro Gln Val Ile Lys Leu Ala Cys Thr Asp Ile Phe Val
            180
                                                    190
Leu Glu Leu Leu Met Ile Ser Asn Asn Gly Met Leu Thr Thr Leu Trp
        195
                            200
Phe Phe Leu Leu Val Ser Tyr Met Val Ile Leu Leu Leu Lys
                        215
Ser Gln Ser Gly Glu Gly Lys Lys Ala Ile Ser Thr Cys Thr Ser
                    230
His Ile Thr Val Ile Thr Leu His Phe Val Pro Cys Ile Tyr Val Tyr
Ala Arg Pro Phe Thr Ala Leu Pro Thr Asp Lys Ala Ile Ser Val Thr
Phe Thr Val Ile Ser Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
Asn Gln Glu Met Lys Ser Ala Met Arg Arg Leu Arg Lys Arg Leu Gly
                                            300
Pro Ser Tyr Trp Ile Glu Arg
305
<210> 2152
<211> 311
<212> PRT
<213> Mus musculus
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<222> (186)...(186)
<223> Any amino acid
<221> VARIANT
<222> (187)...(193)
<223> Any amino acid
<400> 2152
Met Pro His Thr Asn Ser Thr Lys Ile Thr Glu Phe Ile Leu Leu Gly
```

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Leu Thr Asp Arg Pro Glu Leu Gln Pro Leu Leu Phe Val Leu Phe Leu
Phe Ile Tyr Leu Val Thr Leu Leu Gly Asn Met Gly Leu Met Ala Leu
        35
                            40
Ile Arg Leu Asp Ser Arg Leu His Lys Pro Met Tyr Phe Phe Leu Ser
                        55
Asn Leu Ala Phe Val Asp Leu Cys Tyr Thr Ser Thr Ala Thr Pro Gln
                    70
                                        75
Met Leu Thr Asn Phe Leu Ser Glu Lys Lys Thr Ile Ser Phe Ile Gly
               8.5
                                    90
Cys Phe Ile Gln Cys Tyr Leu Phe Ile Ala Leu Leu Leu Thr Glu Phe
                                105
                                                    110
            100
Tyr Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
        115
Pro Leu Arg Tyr Ser Val Lys Met Ser Arg Arg Val Cys Ile Cys Leu
                        135
                                            140
Ala Met Cys Pro Tyr Ile Tyr Gly Phe Ser Asp Gly Leu Phe Gln Thr
                    150
                                        155
Ile Leu Thr Phe Ser Met Thr Phe Cys Lys Ser Asn Val Ile Asn His
                                    170
               165
                                                        175
Phe Tyr Cys Ala Asp Pro Pro Leu Ile Xaa Leu Xaa Xaa Xaa Xaa Xaa
            180
                                185
                                                    190
Xaa Leu Ser Asn Ser Leu Thr Ile Val Leu Val Ser Tyr Ala Phe Ile
        195
                            200
                                                205
Ile Ala Ala Ile Leu Arg Ile Lys Ser Ala Glu Gly Arg Arg Lys Ala
                        215
                                            220
Phe Ser Thr Cys Gly Ser His Met Ala Val Thr Leu Phe Tyr Gly
                    230
                                        235
Thr Leu Phe Cys Met Tyr Val Arg Pro Pro Thr Asp Lys Thr Val Glu
                245
                                    250
Glu Ser Lys Ile Ile Ala Val Phe Tyr Thr Phe Val Ser Pro Leu Leu
                                265
            260
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gln Ala Leu
                            280
                                                285
Lys Thr Ile Leu Arg Gln Asn Val Ile Arg Thr Ala Leu Met Arg Pro
                        295
Pro Ser Asn Lys Leu His Gln
<210> 2153
<211> 242
<212> PRT
<213> Mus musculus
<400> 2153
Met Asp Gly Gly Asn Gln Ser Gly Asp Ser Glu Phe Leu Leu Gly
                                    10
Leu Ser Glu Val Pro Glu His Gln Arg Ile Leu Phe Trp Thr Phe Leu
Ser Met Tyr Leu Val Thr Val Val Gly Asn Val Leu Ile Ile Leu Ala
                            40
Ile Gly Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                    70
                                        75
Met Leu Val Ser Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Pro Gly
                                    90
```

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Cys Leu Thr Gln Leu Phe Phe Leu Val Ser Leu Val Ala Leu Asp Asn
                                 105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                             120
Pro Leu His Tyr Thr Thr Ala Met Ser Pro Lys Leu Cys Ile Leu Leu
                        135
                                             140
Leu Ile Leu Cys Trp Ala Leu Ser Ile Leu Tyr Gly Leu Ile His Thr
                    150
                                         155
Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr
                                     170
                165
Ile Phe Cys Glu Met Tyr Val Leu Leu Arg Leu Ala Cys Ser Asn Thr
                                 185
                                                     190
His Ile Asn His Met Met Leu Ile Ala Thr Gly Cys Phe Val Phe Leu
        195
                            200
Val Pro Phe Gly Phe Met Ile Met Ser Tyr Ile Cys Ile Val Arg Ala
                        215
                                             220
Ile Leu Lys Ile Pro Ser Ala Ser Asn Lys Tyr Lys Ala Phe Ser Thr
                    230
                                         235
Trp Cys
<210> 2154
<211> 351
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (231)...(232)
<223> Any amino acid
<221> VARIANT
<222> (234)...(278)
<223> Any amino acid
<400> 2154
Met Asp Ile Pro Ser Asn Asn Thr Ile Pro Arg Gly Phe Leu Leu Gln
                5
Gly Phe Phe Glu Phe Pro His Leu Lys Pro Leu Leu Phe Leu Val Leu
                                 25
Leu Ala Val His Leu Ala Thr Leu Ser Gly Asn Leu Leu Ile Leu Val
Ala Val Ile Ser Val Pro Ser Arg Pro Pro Met Leu Leu Phe Leu Cys
                        55
Gln Leu Ser Ala Ile Glu Leu Cys Tyr Thr Leu Val Val Val Pro Arg
                    70
Ser Leu Ala Asp Leu Ser Met Pro Gly His Gly Arg Gly Ser Pro Ile
Ser Phe Leu Gly Cys Ala Val Gln Met Gln Met Phe Val Ala Leu Gly
            100
                                 105
Gly Ala Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val
                            120
                                                 125
Ala Ile Cys His Pro Leu Arg Tyr Ala Ser Ile Val Thr Pro Gly Leu
                        135
Cys Ala Arg Leu Ala Leu Ala Cys Cys Leu Gly Gly Leu Ala Val Ser
                    150
                                        155
```

Val Gly Leu Thr Val Ala Val Phe His Leu Pro Phe Cys Gly Ser Arg

170

```
Leu Leu Val His Phe Phe Cys Asp Ile Thr Ala Leu Leu His Leu Ala
                             185
Cys Thr Arg Ser Tyr Val Asp Glu Leu Pro Leu Leu Gly Ala Cys Leu
       195
                          200
Val Leu Leu Leu Pro Ser Met Leu Ile Leu Thr Ser Tyr Gly Ala
                      215
                                        220
Ile Ala Ser Ala Leu Arg Xaa Xaa Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa
                  230
                                     235
245
                                 250
260
                             265
Xaa Xaa Xaa Xaa Xaa Cys Ala Ser His Leu Ala Val Thr Phe Leu
                          280
His Tyr Gly Cys Ala Thr Phe Met Tyr Val Arg Pro Lys Ser Ser Tyr
                      295
                                         300
Ser Pro Arg Leu Asp Arg Thr Leu Ala Leu Val Tyr Thr Asn Val Thr
                  310
                                     315
Pro Leu Leu Tyr Pro Leu Ile Tyr Ser Leu Arg Asn Arg Glu Ile Thr
              325
                                 330
Ser Ala Ile His Arg Val Leu Gly Phe Arg Gly Ser Gly Ser Val
<210> 2155
<211> 304
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (199)...(222)
<223> Any amino acid
<400> 2155
Met Arg Asn His Thr Val Ile Thr Glu Phe Val Leu Leu Gly Ile Ser
                                 10
1
               5
Asp Thr Pro Glu Leu Gln Leu Val Leu Phe Ile Phe Leu Leu Ile Thr
                             25
           20
Tyr Ile Leu Ser Val Thr Gly Asn Leu Thr Ile Ile Ile Leu Thr Leu
                          40
Leu Asp Ser Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                      55
Ser Phe Leu Glu Ile Thr Phe Thr Ser Val Ser Ile Pro Arg Phe Leu
                                     75
                  70
Gly Ser Ile Ile Thr Lys Val Lys Thr Ile Ser Tyr Asn Asn Cys Leu
                                 90
              8.5
Ala Gln Leu Tyr Phe Phe Ile Ser Met Gly Val Ser Glu Phe Phe Leu
           100
                             105
                                                110
Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                          120
                                            125
His Tyr Thr Leu Ile Met Asn Gln Lys Val Cys Thr Leu Leu Val Leu
   130
                      135
Ala Ser Trp Leu Ala Gly Phe Leu Thr Ile Phe Pro Pro Leu Met Leu
                  150
                                     155
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Val Leu Lys Leu Asp Phe Cys Ala Ser Asn Val Ile Asp His Phe Ser

Cys Asp Tyr Phe Pro Ile Leu Gln Leu Ser Cys Ser Asp Pro Arg Ser

170

190

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Leu Glu Met Met Ala Phe Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
                           200
215
Lys Lys Ala Phe Ser Thr Cys Ser Ser His Met Ile Val Ile Ser Met
                   230
Ser Tyr Gly Ser Cys Ile Phe Ile Tyr Val Lys Ser Ser Ala Asn Glu
               245
                                   250
Arg Ala Ser Leu Thr Lys Ala Val Ala Val Leu Asn Thr Ser Ile Ala
                               265
Pro Met Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Gln Gln Val Lys
                           280
Gln Ala Phe Lys Asp Leu Ile Tyr Lys Val Leu Leu Tyr Arg Ser Lys
<210> 2156
<211> 329
<212> PRT
<213> Mus musculus
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<221> VARIANT
<222> (209)...(215)
<223> Any amino acid
<400> 2156
Met Ala Lys Asn Asn Ile Thr Thr Val Thr Glu Phe Ile Leu Ile Gly
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Phe Asn Asp His Pro Lys Trp Glu Ile Pro Leu Phe Leu Val Phe Leu
                               25
Ser Phe Tyr Leu Val Thr Met Leu Gly Asn Leu Gly Met Val Ile Leu
       35
                           40
Ile His Val Asp Val Gln Leu His Ile Pro Met Tyr Phe Phe Leu Ser
                       55
His Leu Ser Val Leu Asp Ala Cys Tyr Thr Ser Val Ile Thr Pro Gln
                   70
                                       75
Ile Leu Ala Thr Leu Ala Thr Gly Lys Thr Val Ile Ser Tyr Arg Cys
                                   90
Cys Ala Ala Gln Phe Phe Phe Thr Ile Cys Ala Ala Thr Glu Cys
           100
                               105
Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Asn
                           120
                                              125
Pro Leu Leu Tyr Thr Val Ala Met Gly Pro Arg Lys Cys Trp Ser Leu
                       135
                                          140
Val Val Gly Ala Tyr Val Cys Gly Met Cys Gly Ala Ile Leu Arg Thr
                   150
                                       155
Thr Cys Thr Phe Ser Leu Ser Phe Cys Glu Asn Asn Gln Ile Asn Phe
               165
                                   170
Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr
           180
                               185
                                                  190
Thr Asn Ile Glu Ile Ile Ile Val Phe Phe Gly Gly Ile Leu Phe Arg
                           200
Xaa Xaa Xaa Xaa Xaa Xaa Gly Asn Phe Val Ile Ser Ala Asn Ala
                       215
Leu Val Ile Leu Ile Ser Tyr Leu Leu Ile Ile Lys Ala Val Met Arg
Met Lys Ser Ser Gly Arg Arg Ala Lys Thr Phe Ser Thr Cys Val Ser
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His Leu Thr Ala Val Ala Leu Leu Phe Gly Thr Leu Ile Phe Met Tyr
                                265
Ile Arg Ser Gly Ser Lys Ser Leu Glu Glu Asp Lys Val Val Ser
        275
                            280
Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu Val Tyr Ser
                        295
                                            300
Leu Arg Asn Lys Asp Val Lys Ala Ala Phe Lys Lys Val Thr Gly Lys
                    310
                                        315
Trp Gln Val Ser His Ser Ile Gln Tyr
                325
<210> 2157
<211> 302
<212> PRT
<213> Mus musculus
<220>
<221> CONFLICT
<222> (95)...(104)
<223> Any amino acid
<400> 2157
Met Lys Asn Arg Thr Ser Val Ser Glu Phe Ile Leu Leu Gly Leu Thr
1
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Asn Asp Pro Lys Leu Asn Ile Leu Ile Phe Val Phe Leu Phe Ile Thr
            20
                                25
Tyr Ile Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu
                            40
Ile Asp Ser His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                        55
                                            60
Ser Phe Leu Glu Ile Ser Phe Thr Thr Val Ser Ile Pro Arg Phe Leu
                    70
                                        75
Val Ser Ile Val Thr Gly Asp Met Thr Ile Ser Tyr Ser Ser Xaa Xaa
                                    90
                8.5
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Thr Ala Met Ser Tyr Asp Arg Tyr
            100
                                105
                                                    110
Val Ala Ile Cys Lys Pro Leu His Tyr Thr Thr Ile Met Ser Ser Arq
                            120
Val Cys Met Gln Leu Ile Val Ser Ser Trp Leu Ala Gly Phe Leu Ile
    130
                        135
                                            140
Ile Phe Pro Pro Val Ile Met Gly Leu Gln Leu Asp Phe Cys Asp Ser
                    150
                                        155
Asn Ile Ile Asp His Phe Thr Cys Asp Ser Ser Pro Leu Leu Leu Ile
                                    170
                165
Ser Cys Thr Asp Thr Ala Phe Leu Glu Leu Phe Ala Phe Phe Leu Ala
            180
                                185
                                                    190
Val Leu Thr Leu Ile Val Thr Leu Thr Leu Val Ile Leu Ser Tyr Ser
        195
                            200
                                                205
Phe Ile Leu Arg Thr Ile Leu Arg Ile Pro Ser Ala Glu Gln Arg Lys
                        215
                                            220
Lys Ala Phe Ser Thr Cys Ser Ser His Met Ile Val Val Ser Ile Ser
                    230
                                        235
Tyr Gly Ser Cys Ile Phe Met Tyr Val Lys Thr Ser Ala Lys Glu Gly
                245
                                    250
Val Thr Leu Thr Lys Gly Ile Ala Val Leu Asn Thr Ser Val Ala Pro
                                265
Met Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys Gln Val Lys Glu
                            280
```

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Ala Phe Lys Thr Leu Ile Lys Lys Arg Phe Ser Asn Lys Ile
    290
                        295
<210> 2158
<211> 241
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (116)...(122)
<223> Any amino acid
<400> 2158
Met Thr Ile His Asn Asn Arg Ser Val Ser His Pro Asp Thr Phe Phe
                                    10
Leu Ile Gly Ile Pro Gly Leu Glu Glu Ile His Ala Trp Ile Ser Leu
Pro Phe Cys Cys Ile Tyr Leu Val Ala Leu Met Val Asn Thr Met Ile
Leu Val Val Ile Lys Thr Glu Arg Ser Leu Arg Glu Pro Met Phe Tyr
Phe Leu Ala Ile Leu Ser Ser Val Asp Leu Ala Leu Ser Thr Thr Ser
Val Pro Arg Met Leu Gly Ile Phe Trp Phe Asp Ala His Glu Ile Asn
                                    90
Phe Gly Gly Cys Val Ala Gln Met Phe Leu Ile His Ala Phe Thr Gly
            100
                                105
Met Glu Ala Xaa Xaa Xaa Xaa Xaa Xaa Asn Ile His Ile Asn Ala
                            120
Val Tyr Gly Leu Phe Val Val Ser Leu Phe Leu Leu Asn Leu Val Leu
                        135
                                            140
Ile Gly Ile Ser Tyr Gly Tyr Ile Leu Arg Ala Val Phe Arg Leu Pro
                    150
                                        155
Ser Gln Asp Ala Arg Leu Lys Ala Leu Ser Thr Cys Gly Ser His Val
                165
                                    170
                                                         175
Ala Val Leu Cys Val Phe Tyr Ile Pro Ser Val Phe Ser Phe Leu Thr
                                185
                                                    190
His Arg Phe Gly His Asn Ile Pro His Tyr Ile His Ile Leu Val Ala
                            200
Asn Leu Tyr Leu Val Ile Pro Pro Ser Leu Asn Pro Ile Ile Tyr Ser
                                            220
Val Arg Thr Lys Gln Ile Arg Glu His Val Leu His Ile Phe Thr Lys
                    230
                                                             240
Arg
<210> 2159
<211> 240
<212> PRT
<213> Mus musculus
<400> 2159
Leu Ser Phe Ser Ser Leu Pro Thr Met Leu Lys Ile Phe Phe Asn
1
                5
                                    10
Ala Met Ala Ile Ser Pro Asn Ala Cys Phe Ala Gln Glu Phe Phe Ile
                                25
            20
```

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His Gly Phe Thr Val Met Glu Ser Ser Val Leu Leu Ile Met Ser Leu
Asp Arg Phe Leu Ala Ile His Asn Pro Leu Arg Tyr Ser Ser Ile Leu
                        55
Asn Gly Arg Arg Val Ala Lys Ile Gly Leu Ile Leu Ala Phe Arg Ser
                    70
Thr Val Leu Val Leu Pro Phe Pro Phe Thr Leu Arg Lys Leu Lys Tyr
Cys His Lys Asn Leu Leu Ser His Ser Tyr Cys Leu His Gln Asp Val
                                105
Met Lys Leu Ala Cys Ser Asp Asn Lys Ile Asn Phe Ile Tyr Gly Phe
        115
                            120
Phe Val Ala Leu Cys Thr Met Leu Asp Phe Ala Leu Ile Leu Met Ser
    130
                        135
                                            140
Tyr Val Leu Ile Leu Lys Thr Val Leu Ser Ile Ala Ser Leu Ala Glu
                    150
                                        155
Arg Leu Lys Ala Leu Asn Thr Cys Val Ser His Ile Cys Ala Val Leu
                165
                                    170
                                                         175
Ile Phe Tyr Val Pro Ile Ile Thr Leu Ala Ala Ile His Arg Phe Ala
            180
                                185
                                                    190
Lys His Lys Ser Pro Leu Leu Val Ile Leu Ile Ala Asp Met Phe Leu
        195
                            200
                                                205
Leu Val Pro Pro Leu Met Asn Pro Ile Val Tyr Cys Ile Lys Thr Arg
                        215
                                            220
Gln Ile Arg Glu Lys Val Leu Gly Lys Leu Val Asn Leu Cys Val Arg
<210> 2160
<211> 281
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (146)...(248)
<223> Any amino acid
<400> 2160
Met Glu Asn Arg Thr Val Pro Thr Glu Phe Ile Leu Leu Gly Leu Ser
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Asp Asp Pro Gly Leu Gln Ile Val Ile Phe Leu Phe Leu Ile Leu Met
                                25
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Tyr Ile Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu 40 4.5 Val Asp Pro His Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Val Leu Glu Ile Thr Phe Thr Thr Val Cys Ile Pro Arg Phe Leu 75 Ser Thr Ile Val Thr Arg Asp Lys Thr Ile Ser Tyr Asn Ser Cys Thr Ala Gln Leu Phe Phe Ile Phe Leu Gly Ile Thr Glu Phe Tyr Leu 100 105 110 Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Thr Thr Ile Met Asn Arg Arg Val Cys Ile Leu Arg Ser Phe 140

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165
                             170
180
                         185
                                         190
200
215
230
                                235
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala Pro Met Met Asn Pro Phe Ile
                            250
Tyr Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Ala Ile
                         265
         260
Gln Lys Val Val Leu Phe Ser Gly Lys
      275
<210> 2161
<211> 140
<212> PRT
<213> Mus musculus
<400> 2161
Met Ser Leu Tyr Asn Ile Thr Glu Val His Pro Ser Ser Phe Leu Leu
Leu Gly Ile Pro Gly Leu Glu Tyr Ala His Ile Trp Ile Gly Phe Pro
Phe Cys Phe Leu Tyr Leu Ile Ala Ile Leu Gly Asn Ala Ala Val Leu
Phe Val Ile Gln Thr Glu His Ser Leu His Glu Pro Met Tyr Tyr Phe
Leu Ala Met Leu Asp Ser Ile Asp Leu Gly Leu Thr Thr Ala Thr Ile
                70
Pro Lys Met Leu Gly Ile Phe Trp Phe Asn Leu Arg Glu Ile Ser Phe
                             90
Gly Gly Cys Leu Ser Gln Met Phe Phe Ile His Phe Phe Thr Val Met
         100
                         105
Glu Ser Ile Met Leu Leu Ala Met Gly Phe Asp Arg Tyr Val Ala Ile
                      120
Cys Lys Pro Leu Gln Tyr Thr Val Ile Leu Thr Asn
   130
                   135
<210> 2162
<211> 305
<212> PRT
<213> Mus musculus
<400> 2162
Met Gly Glu Asp Asn Arg Thr Ser Val Thr Glu Phe Ile Phe Leu Gly
1
                            10
Leu Ser Gln Asp Pro Gln Thr Gln Val Leu Leu Phe Phe Leu Phe Leu
         20
                         25
Phe Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu Leu Ile Ile Val Leu
      35
                      40
Ile His Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Arg Asn Leu
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Ser Phe Ala Asp Leu Cys Phe Ser Thr Thr Thr Val Pro Gln Val Leu

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Val His Phe Leu Val Lys Arg Lys Thr Ile Ser Phe Ala Gly Cys Ser
               85
                                  90
Ile Gln Leu Val Val Leu Leu Val Gly Cys Thr Asp Cys Ala Leu
                              105
Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Lys Pro Leu
                          120
His Tyr Ser Thr Ile Met Thr His Trp Val Cys Val Gln Leu Ala Ala
                      135
Gly Ser Trp Ala Ser Gly Ala Phe Val Ser Leu Val Asp Ala Thr Phe
                  150
                                     155
Thr Leu Arg Leu Pro Tyr Arg Gly Asn Asn Val Ile Asn His Phe Phe
               165
                                  170
Cys Glu Pro Pro Ala Leu Leu Lys Leu Ala Ser Ala Asp Thr Tyr Ser
                              185
                                                 190
Thr Glu Met Ala Ile Phe Ala Met Gly Val Val Ile Leu Leu Ala Pro
       195
                          200
Val Ser Leu Ile Leu Ile Ser Tyr Trp Asn Ile Ile Cys Thr Val Ile
                      215
                                         220
Gln Met Gln Ser Gly Glu Gly Arg Leu Lys Val Phe Ser Thr Cys Gly
                  230
                                     235
Ser His Leu Ile Val Val Gly Leu Phe Tyr Gly Ser Ala Ile Phe Ala
               245
                                  250
Tyr Met Arg Pro Asn Ser Lys Ile Met Asn Glu Arg Asp Lys Met Ile
           260
                              265
                                                270
Ser Val Phe Tyr Ser Ala Val Thr Pro Met Leu Asn Pro Ile Ile Tyr
                          280
Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Arg Arg Ile Thr Ser
Arq
305
<210> 2163
<211> 355
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (101)...(161)
<223> Any amino acid
<400> 2163
Met Gly Glu Asp Asn Arg Thr Ser Val Thr Glu Phe Ile Phe Leu Gly
                                  1.0
Leu Ser Gln Asp Pro Gln Thr Gln Val Leu Leu Phe Phe Leu Phe Leu
                              25
Phe Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu Leu Ile Ile Val Leu
                          40
                                             45
Ile His Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Arg
                      55
                                         60
Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Thr Thr Thr Val Pro Gln
                  70
                                     75
Val Leu Val His Phe Leu Val Lys Arg Lys Thr Ile Ser Phe Ala Gly
                                 90
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115
                          120
135
                                         140
150
                                     155
Xaa Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Lys
                                  170
                                                     175
Pro Leu His Tyr Ser Thr Ile Met Thr His Trp Val Cys Val Gln Leu
                                                 190
Ala Ala Gly Ser Trp Ala Ser Gly Ala Leu Val Ser Leu Val Asp Thr
                          200
       195
Thr Phe Thr Leu Arg Leu Pro Tyr Arg Gly Asn Asn Val Ile Asn His
                      215
Phe Phe Cys Glu Pro Pro Ala Leu Leu Lys Leu Ala Ser Ala Asp Thr
                   230
Tyr Ser Thr Glu Met Ala Ile Phe Ala Met Gly Val Val Ile Leu Leu
                                  250
Ala Pro Val Ser Leu Ile Leu Thr Ser Tyr Trp Asn Ile Ile Ser Thr
Val Ile Gln Met Gln Ser Gly Glu Gly Arg Leu Lys Val Phe Ser Thr
                          280
Cys Gly Ser His Leu Ile Val Val Val Leu Phe Tyr Gly Ser Ala Ile
                      295
Phe Ala Tyr Met Arg Pro Asn Ser Lys Ile Met Asn Glu Lys Asp Lys
                   310
                                     315
Met Ile Ser Val Phe Tyr Ser Ala Val Thr Pro Met Leu Asn Pro Ile
               325
                                  330
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Arg Arg Ile
Thr Leu Lys
       355
<210> 2164
<211> 193
<212> PRT
<213> Mus musculus
<400> 2164
Asp His Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Ala Thr Val Leu
                                  10
Thr Asn Ala Arg Ile Val Ala Met Gly Leu Gly Thr Val Leu Arg Ser
                              25
Phe Val Leu Ile Val Val Phe Pro Val Leu Leu His Arg Leu Pro Phe
                          40
Cys His Pro Gln Asn Ile Leu Ser His Ala Tyr Cys Leu His Val Asp
                      55
Met Ile Lys Leu Ala Cys Thr Asp Val Ser Leu Asn Ser His Tyr Gly
                  70
                                     7.5
Leu Ser Ile Val Leu Leu Thr Phe Gly Leu Asp Ser Ala Leu Ile Leu
                                  90
               85
Ile Ser Tyr Val Leu Ile Leu Arg Ser Val Leu Ala Ile Ala Ser Arg
           100
                              105
                                                 110
Glu Glu Arg Leu Lys Thr Leu Asn Thr Cys Val Ser His Ile Leu Ala
       115
                          120
                                             125
Val Leu Ile Phe Tyr Val Pro Met Val Ser Val Ser Ile Val His Arg
                      135
                                         140
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Phe Gly Ala Gly Leu Pro His Ala Val His Ile Leu Met Ser Ile Leu

Tyr Leu Phe Val Pro Pro Met Leu Asn Pro Ile Ile Tyr Ser Ile Lys 165 170 175 Thr Lys Glu Ile Arg Arg Arg Leu Leu Lys Met Leu Phe Arg Val Lys 180 180 185 190 Leu

<210> 2165 <211> 313 <212> PRT <213> Mus musculus <400> 2165 Leu Leu Val Ser Leu Glu Gln Arg Ile Met Lys Phe Leu Thr Gly Ile Pro Gly Leu Glu Thr Gln His Gly Trp Leu Ser Ile Pro Ile Phe Ile 25 Met Tyr Met Val Ala Ile Val Gly His Ser Leu Ile Met Ala Ala Val 40 45 Gln Gln Val Ser Val Phe His Glu Pro Met Tyr Leu Phe Phe Tyr Met 55 Leu Ala Ile Asn Glu Val Gly Val Ser Glu Ser Thr Met Pro Thr Val 75 Arg Ser Ser Leu Trp Phe Asp Ala Asn Arg Ile Asp Leu Asp Gly Cys 90 Leu Ala Gln Met Leu Phe Ile His Thr Phe Ser Gly Met Gly Ser Gly 100 105 110 Val Leu Leu Thr Met Ser Tyr Glu Asp Phe Val Thr Ile Tyr Asn Pro 120 125 Leu Arg His Thr Ala Phe Leu Thr Leu Pro Arg Ile Ile Ser Met Gly 135 140 Leu Gly Ile Thr Leu Lys Ser Val Thr Leu Met Ala Pro Leu Gln Ile 150 155 Leu Leu Lys Gln Arg Pro Tyr Cys His Ile Asn Ile Leu Ser His Ser 165 170 175 Tyr Gly Leu His Ala Asp Leu Ile Gln Leu Pro Cys Ala Asp Thr Arg 185 190 Leu Asn Ser Ile Leu Arg Leu Thr Ile Val Leu Ala Thr Phe Gly Leu 200 205 Asp Ser Leu Phe Ile Val Val Ser Tyr Gly Leu Ile Leu Tyr Thr Val 215 220 Met Gly Ile Ala Ser Gly Glu Gly Arg Lys Lys Ala Leu Asn Thr Cys 230 235 Val Ser His Ile Cys Ala Val Leu Ile Tyr Tyr Val Pro Met Ile Gly 245 250 Val Ser Met Met His Arg Val Ala Lys His Ala Ser Pro Val Val His 265 Thr Leu Met Leu Ser Ile Tyr Leu Phe Val Pro Pro Val Leu Asn Pro 280 285 Ile Ile Tyr Ser Val Lys Thr Arg Pro Ile Gln Gln Gly Ile Ala Asn 295 Leu Phe Ser Cys Lys Lys Gly Ser Ile 310

<210> 2166

<211> 193

<212> PRT

<213> Mus musculus

<400> 2166 Arg Tyr Val Ala Ile Cys Asp Pro Leu Arg His Ala Ser Ile Phe Thr 10 Gln Arg Leu Leu Thr Gln Ile Gly Val Gly Val Thr Leu Arg Ala Ala Leu Phe Val Ala Pro Cys Leu Phe Leu Ile Lys Cys Arg Leu Lys Phe Tyr Trp Thr Thr Val Val Ser His Ser Tyr Cys Glu His Met Ala Ile 55 Val Lys Leu Ala Ala Glu Asp Val His Val Asn Lys Ile Tyr Gly Leu 70 Phe Val Ala Phe Ser Ile Leu Gly Leu Asp Ile Ile Phe Ile Thr Leu 85 90 Ser Tyr Ile Arg Ile Phe Ile Thr Val Phe Lys Leu Pro Gln Lys Glu 100 105 Ala Arg Leu Lys Ala Phe Asn Thr Cys Ile Ala His Ile Cys Val Phe 115 120 125 Leu Glu Phe Tyr Leu Leu Ala Phe Phe Ser Phe Phe Thr His Arg Phe 135 140 Gly Tyr His Val Pro Ser Tyr Ile His Ile Leu Leu Ser Asn Leu Tyr 150 Leu Leu Val Pro Pro Leu Leu Asn Pro Ile Val Tyr Gly Val Lys Thr 170 175 Lys Gln Ile Arg Asp Gln Val Ser Lys Ile Leu Tyr Cys Asn Tyr Ser 180 185 Tyr

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<210> 2167
<211> 218
<212> PRT
<213> Mus musculus
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<400> 2167

Pro Ile Thr Lys Val Ile Tyr Ala Ser Asn Leu Pro Phe Val Leu Ser 10 Asn Phe Leu Leu Gly Ala Asn Lys Ile Cys Phe Glu Thr Cys Leu Leu Lys Met Phe Ser Ile His Ser Phe Ser Ile Met Glu Ser Gly Val Leu 40 Leu Ala Met Ser Val Asp Arg Phe Val Ala Ile Tyr Lys Pro Leu Arg 55 Tyr Pro Val Lys Leu Thr Leu Pro Arg Ile Ala Gly Thr Arg Val Thr 70 75 Leu Gly Leu Lys Ser Leu Leu Leu Met Phe Leu Leu Pro Phe Leu Leu 90 Lys Arg Leu Pro Phe Cys Gly His Asn Val Leu Ser His Ser Tyr Cys 100 105 Leu His Ser Asp Leu Ile Gln Leu Pro Cys Gly Asp Thr Arg Pro Asn 120 125 Ser Ile Leu Gly Leu Arg Ile Val Thr Ser Thr Phe Gly Leu Asp Ser 135 140 Leu Leu Ile Val Val Pro Tyr Val Leu Ile Leu Ser Met Val Ser Leu 150 155 Phe Arg Leu Val Leu Val Val Asp Arg Gly Glu Lys Glu His Ala 165 170

Phe Met Asn Glu Leu Lys Ile Ser Leu Glu Lys Tyr Leu Pro Ile Leu 180 185 Pro Val Gln Val Ala Ser Val Val Leu Tyr Trp Pro Arg Gln His Ser 195 200 205 Ala Arg Lys Val Val Ser Asn Leu Met Thr 210 <210> 2168 <211> 305 <212> PRT <213> Mus musculus <400> 2168 Met Pro Ile Phe Tyr Asn Ser Thr Ser Pro Thr Phe Leu Leu Thr Gly Val Pro Gly Leu Glu Trp Ala His Pro Trp Ile Ser Ile Pro Phe Cys Cys Leu Tyr Phe Thr Ala Leu Ser Gly Asn Ser Leu Ile Leu Phe Leu 35 40 Val Leu Thr Glu Pro Thr Leu Gln Glu Pro Met Tyr Tyr Phe Leu Ser 55 Met Leu Ser Ser Thr Asp Ile Gly Leu Cys Ile Ser Thr Ile Val Thr 70 Val Leu Gly Ile Phe Trp Leu Asn Ala Arg Glu Ile Ser Phe Ser Ala 90 Cys Leu Ser Gln Met Phe Phe Ile His Leu Phe Thr Phe Met Glu Ser 105 Ser Val Leu Leu Ala Met Ala Phe Asp Arg Phe Val Ala Ile Ser Asn 120 125 Pro Arg Tyr Ala Ala Ile Leu Thr His Ala Arg Ile Ala Gln Ile Gly 135 140 Leu Ala Ile Ile Thr Lys Ala Thr Val Ile Leu Thr Pro Pro Val Leu 150 155 Leu Leu Lys Arg Leu Ser Phe Cys Arg Ser Arg Val Leu His His Ser 170 175 Tyr Cys Phe His Pro Asp Val Met Lys Leu Ser Cys Ser Asp Thr Lys 185 190 Ile Asn Ser Ala Phe Gly Leu Thr Ala Ile Ile Ser Thr Ala Gly Val 195 200 Asp Ser Ile Phe Ile Leu Leu Ser Tyr Ala Leu Ile Ile Arg Ser Val 210 220 Leu Ser Ile Ala Ser Pro Arg Glu Arg Lys Lys Ala Phe Ser Thr Cys 235 230 Ile Ser His Val Thr Ala Val Ala Ile Phe Tyr Ile Pro Leu Ile Ser 245 250 Leu Ser Phe Val His Arg Phe Gly Lys His Ala Leu Pro Tyr Val Pro 265 Thr Leu Ile Ala Asn Val Tyr Leu Leu Ile Pro Pro Val Met Asn Pro 280 Ile Ile Tyr Ser Val Lys Gln Ser Ser Arg Glu Leu Phe Ser Asp Ser 295 300 Tyr 305

<210> 2169 <211> 233 <212> PRT

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<400> 2169
Thr Ile Pro Lys Met Leu Gly Ile Phe Trp Phe Ser Phe Arg Val Ile
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Leu Phe Gly Ala Cys Leu Thr Gln Met Phe Phe Ile His Asn Phe Thr
Gly Met Glu Ser Ala Val Leu Leu Ala Met Ala Tyr Asp Arg Tyr Val
Ala Ile Cys Asn Pro Leu Arg Tyr Ser Thr Ile Leu Thr Asn Lys Ala
Val Phe Met Ile Gly Leu Gly Val Leu Val Arg Ser Phe Leu Ser Val
                                        75
Ile Pro Phe Val Phe Leu Ile Leu Arg Leu Pro Phe Cys Gly Asn Asn
Val Ile Pro His Thr Tyr Cys Glu His Met Gly Leu Ala Arg Leu Ser
                                105
Cys Ala Asn Ile Lys Val Asn Ile Ile Tyr Gly Leu Gly Ala Ile Ser
                            120
Ile Leu Phe Phe Asp Ile Ile Ala Ile Ala Leu Ser Tyr Ala Gln Ile
                        135
Leu Arg Ala Val Phe Arg Leu Pro Ser Arg Glu Ala Arg Ile Lys Ser
                    150
                                        155
Leu Ser Thr Cys Gly Ser His Val Cys Val Ile Leu Ala Phe Tyr Thr
                165
                                    170
                                                         175
Pro Ala Leu Phe Ser Phe Met Thr His Arg Phe Gly Arg Asn Val Pro
                                185
                                                     190
Arg Tyr Ile His Ile Leu Leu Ala Asn Leu Tyr Val Val Pro Pro
        195
                            200
Met Leu Asn Pro Val Ile Tyr Gly Val Arg Thr Lys Gln Ile Tyr Asp
                        215
Arg Val Lys Lys Ile Phe Leu Gln Lys
                    230
<210> 2170
<211> 195
<212> PRT
<213> Mus musculus
<400> 2170
Met Phe Pro Leu Asn Asp Thr Gln Thr Leu Lys Phe Leu Leu Ile Gly
Ile Pro Gly Leu Gln Lys Ser His Ile Trp Val Ser Ile Pro Phe Pro
Phe Val Tyr Leu Leu Ser Phe Leu Gly Asn Val Ile Val Leu Phe Phe
        35
Ile Lys Thr Glu Gln Ser Leu His Lys Pro Met Tyr Phe Phe Leu Ser
    50
Met Leu Ser Ile Ser Asp Leu Gly Leu Ser Leu Ser Ser Leu Pro Thr
                    70
Thr Leu Gly Leu Phe Leu Leu Gly Ile His Glu Ile His Ala Ala Ala
                8.5
                                    90
Cys Phe Ala Gln Glu Phe Phe Ile His Leu Phe Thr Val Thr Glu Ala
                                105
                                                    110
Ser Val Leu Ser Val Met Ala Phe Asp Arg Tyr Val Ala Ile His Ser
```

135

Pro Leu Lys Tyr Ser Thr Ile Leu Thr Ser Ser Arg Val Ile Lys Ile

125

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Gly Val Ser Leu Thr Ser Lys Asn Val Leu Phe Ile Leu Pro Leu Pro
                    150
Phe Leu Leu Gln Arg Leu Asn Tyr Cys His Asn Leu Leu Ser His Ser
                                    170
                165
Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ser Asp Asn Ser
                                185
Val Val Ser
        195
<210> 2171
<211> 271
<212> PRT
<213> Mus musculus
<400> 2171
Leu Ser Ile Asn Tyr Phe Phe Trp Pro Gln Ala Ser Leu Phe Ile Phe
Ile Phe Ile Phe Ile Asn Asn Arg Glu Glu Met Ser Pro Leu
Pro Gln Pro Lys Thr Cys Leu Leu Arg Gly Gly Ala Ser Cys Ser Ile
Ile Leu Pro Cys Leu Leu Glu Pro Ala Ala Leu Arg Phe Arg Ser
                        55
His His Val Ile Thr Leu Leu Leu Asp Ser Lys Ile Ile Trp Gln Asn
                                        75
Trp Ala Pro Pro Pro Ser Phe Ile Thr Glu Cys Arg Asn Ser Lys Asn
                                    90
Thr Leu Ser Arg Glu Leu Cys Leu Gly Ser Phe Leu Ile Ser Arg Ser
            100
                                105
                                                    110
Pro Ala Gln Pro Leu Phe Ser Ser Arg Phe Pro Lys Cys Leu Thr Arg
                            120
                                                125
Leu Glu Pro Arg Leu Ser Thr Gly Gln Thr Gln His Asn Arg Ile Asn
                        135
                                            140
Val Val Tyr Gly Leu Cys Ala Ala Leu Ser Thr Met Leu Asp Leu Val
                    150
                                        155
Phe Ile Ile Phe Ser Tyr Ile Met Ile Leu Lys Thr Val Leu Gly Ile
                165
                                    170
                                                        175
Gly Thr Pro Arg Glu Gln Phe Lys Ala Leu Asn Thr Cys Phe Ser His
                                185
                                                    190
Ile Cys Pro Val Leu Ile Phe Tyr Val Pro Met Leu Ser Ala Ala Met
                            200
Leu His His Phe Ala Lys Asn Val Phe Pro Leu Thr His Ile Leu Met
                        215
                                            220
Ala Asp Val Phe Leu Leu Val Pro Pro Leu Met Asn Pro Ile Val Tyr
                    230
                                        235
Cys Val Lys Thr Cys Gln Ile Arg Glu Lys Ile Leu Arg Lys Leu Cys
                                    250
                245
Ser Lys Lys Leu Ile Gln Gly Arg Arg Lys Gln Ile Lys Val
            260
                                265
<210> 2172
<211> 285
```

<212> PRT

<213> Mus musculus

<400> 2172

Met Thr Leu Ser Leu Met Leu Ala Ser Arg Asn Ser Ser Ser His Ser

```
Thr Phe Phe Ile Leu Leu Ala Ile Pro Gly Leu Glu Asn Tyr Gln Phe
                                25
                                                     30
Val Val Phe Leu Phe Cys Val Met Tyr Ile Val Ala Val Thr Gly Asn
Thr Thr Ile Leu His Ile Ile His Ile Asp His Thr Leu His Glu Pro
                        55
Met Tyr Leu Phe Leu Ala Met Leu Ala Thr Thr Asp Leu Val Leu Ser
Ser Ser Thr Gln Pro Lys Met Leu Ala Ile Leu Trp Phe His Asp His
Lys Ile Glu Tyr His Ala Cys Leu Ile Gln Val Phe Phe Ile His Ala
            100
                                105
Phe Ser Ser Val Glu Ser Gly Val Leu Met Thr Met Ala Leu Asp Arg
                            120
                                                 125
Tyr Val Ala Ile Cys Phe Pro Leu Arg His Ser Ser Ile Leu Thr Thr
                        135
                                             140
Ser Ala Val Ile Lys Leu Gly Ala Val Val Met Val Arg Gly Leu Leu
                    150
                                         155
Trp Val Ser Pro Phe Cys Phe Met Val Ser Arg Met Pro Phe Cys Pro
                165
                                    170
                                                         175
Asn Lys Val Ile Ser Gln Ser Tyr Cys Asp His Met Ala Val Phe Lys
            180
                                185
                                                     190
Leu Ile Cys Ala Asp Thr Arg Val Asn His Glu Tyr Gly Leu Phe Val
        195
                            200
                                                 205
Ala Phe Ser Val Val Gly Phe Asp Ile Ile Val Ile Ser Val Ser Tyr
                        215
                                             220
Val Met Ile Leu Arg Ala Val Leu Arg Leu Pro Ser Gly Glu Ala Arg
                    230
                                         235
Leu Lys Ala Phe Gly Thr Cys Ala Ser His Ile Gly Val Ile Leu Thr
                245
                                    250
Leu Tyr Ile Pro Ala Leu Phe Thr Phe Leu Thr His Leu Phe Gly His
                                265
            260
His Val Pro Leu Val Val His Ile Ile Phe Ala Asn Val
<210> 2173
<211> 319
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (109)...(238)
<223> Any amino acid
<221> VARIANT
<222> (240)...(246)
<223> Any amino acid
<400> 2173
Met Leu Thr Tyr Asn Lys Thr Asn Val His Pro Ser Thr Phe Ile Leu
Ile Gly Ile Pro Gly Leu Glu Ala Ala His Met Trp Ile Ser Ile Pro
Phe Cys Met Gly Tyr Ile Leu Ala Leu Val Gly Asn Ser Ser Leu Leu
Phe Ile Ile Lys Thr Asp Ser Ser Leu His Glu Pro Met Tyr Leu Phe
```

```
Leu Cys Met Leu Ala Val Ala Asp Leu Val Val Cys Thr Thr Ala Val
          70
                     7.5
Pro Lys Leu Ser Leu Phe Trp Phe His Val Gly Glu Ile Arg Phe
                   90
Glu Ala Cys Leu Thr Gln Val Phe Leu Ile His Ser Xaa Xaa Xaa Xaa
                 105
                           110
120
140
170
185
200
215
230
Xaa Xaa Xaa Xaa Xaa Thr Cys Gly Ser His Val Cys Val Ile Leu
                   250
Val Phe Tyr Thr Pro Ala Phe Phe Ser Phe Leu Thr His Arg Phe Gly
                 265
His Lys Val Ala Pro His Val His Ile Leu Val Ala Asn Met Tyr Leu
              280
Leu Val Pro Pro Met Leu Asp Pro Ile Ile Tyr Gly Val Arg Thr Lys
            295
Lys Ile Arg Asp Arg Phe Leu Lys Leu Phe Leu Phe Gln Arg Val
```

<210> 2174

<211> 353

<212> PRT

<213> Mus musculus

<400> 2174

 Met
 Pro
 Ser
 Phe
 Asn
 Gln
 Ser
 Ser
 Ala
 Gln
 His
 His
 Ser
 Phe
 Phe
 15

 Leu
 Pro
 Gly
 Ile
 Pro
 Gly
 Leu
 Glu
 Leu
 Ser
 His
 Asn
 Trp
 Thr
 Ser
 Met

 Ser
 Phe
 Cys
 Tyr
 Ala
 Ile
 Thr
 Val
 Ser
 Gly
 Asn
 Gly
 Ile
 Ile
 Leu
 Phe

 Val
 Thr
 Ile
 Thr
 Glu
 Ser
 Ser
 Leu
 Pro
 Gly
 Pro
 Met
 His
 Tyr
 Phe
 Leu
 Phe
 Leu
 Phe
 Leu
 Cys
 Leu
 Ser
 Leu
 Val
 Asn
 Ile
 Yar
 Ile
 Ile

```
Tyr Gly Tyr Ala Gln Asn Leu Gln Tyr Glu Trp Glu Lys Ser Cys Lys
                165
                                    170
Glu Glu Lys Ser Ala Gln Cys Leu His Trp Pro Asn Val Ile Tyr Val
                                185
                                                     190
Phe Ile Phe Met Asp Ser Ser Val Leu Leu Val Ile Ala Phe Glu Tyr
        195
                            200
Phe Thr Val Ile Cys Asp Ser Leu Gly Cys Ala Val Ile Ser Thr His
                        215
                                            220
Ser Arg Leu Ile Thr Val Gly Phe Ala His Val Ala Met Arg Thr Thr
                    230
                                        235
Ala Pro Val Leu Leu Leu Leu Phe Lys His Leu Cys Phe Cys Cys
                                    250
Arg His Met His Ile Gln Tyr Val Leu Ile Ile His Ser Val Leu Cys
                                265
Ser Val Ser Ser Glu Gly Trp Lys Val Leu Gly Ala Cys Leu Ser His
                            280
                                                 285
Leu Ser Ala Ala Thr Ile Ser Tyr Met Pro Thr Ser Val Cys Leu Val
                        295
Gln Arg Phe Arg Lys His Asp Leu Pro Phe Leu Tyr Ile Ser Met Val
                    310
                                        315
Gly Val Cys Leu Leu Ile Pro Ser Met Asn Leu Ile Ile His His Asn
                325
                                    330
                                                         335
Arg His Glu Asn Lys Pro Leu Val Lys Phe Ser Phe Thr Ser Tyr Phe
                                345
Arq
<210> 2175
<211> 276
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (163)...(164)
<223> Any amino acid
<221> VARIANT
<222> (166)...(199)
<223> Any amino acid
<400> 2175
Met Ser Ile Phe Leu Met Ser Asn Leu Ser Thr Ser Arg Phe Val Leu
Thr Gly Phe Pro Gly Leu Glu Phe Tyr Tyr Ile Leu Leu Ala Ile Pro
                                25
Phe Ser Thr Val Tyr Ala Met Val Phe Leu Gly Asn Cys Met Ile Leu
His Val Ile Arg Thr Glu Ser Ser Leu His Gln Pro Met Phe Tyr Phe
                        55
Leu Ala Met Leu Ala Leu Thr Asp Leu Cys Met Gly Leu Ser Thr Val
                    70
His Thr Val Leu Gly Ile Leu Trp Gly Phe Leu Gln Glu Ile Ser Leu
                85
                                    90
Asp Ala Cys Ile Ala Gln Ser Tyr Phe Ile His Gly Leu Ser Ile Met
```

100

Val Thr Ser Gly Gln Asp Met Leu Leu Tyr Ile Ser Thr His Arg Glu

```
Glu Ser Ser Leu Thr Met Ser Phe Asp Arg Tyr Ile Ala Ile Cys Asn
                     120
Pro Leu Arg Tyr Ser Ser Ile Leu Thr Asn Asp Arg Ile Leu Lys Ile
                  135
                                  140
Gly Val Ala Ile Leu Cys Val Arg Ser Ser Met Leu Ile Pro Pro Val
               150
                               155
165
                           170
180
                        185
Xaa Xaa Xaa Xaa Xaa Xaa Lys Ser Leu Gln Thr Cys Val Ser His
      195
                     200
Ile Ser Ala Val Leu Val Phe Tyr Ile Pro Ile Ile Gly Leu Thr Met
                  215
Val His Arg Phe Gly Lys His Leu Ser Pro Leu Val Gln Val Leu Met
               230
                               235
Gly Asn Ile Tyr Ile Leu Phe Pro Pro Phe Met Asn Pro Ile Ile Tyr
            245
                            250
Ser Ile Lys Thr Gln Gln Ile Arg Val Arg Ile Gly Arg Leu Phe Thr
Leu Lys Gly Thr
      275
<210> 2176
<211> 319
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (114)...(249)
<223> Any amino acid
<400> 2176
Met Ala Leu Ser Asn Asp Ser Glu Ala Pro Ile Ser Glu Phe Leu Leu
             5
                            10
1
Ile Cys Phe Pro Asn Tyr Gln Thr Trp Gln His Trp Leu Ser Leu Pro
                         25
Leu Ser Leu Leu Phe Leu Leu Ala Met Gly Ala Asn Ala Thr Leu Leu
                     40
Ile Thr Ile Arg Leu Glu Ala Ser Leu His Glu Pro Met Tyr Tyr Leu
                  55
Leu Ser Leu Leu Ser Leu Leu Asp Ile Val Leu Cys Leu Thr Val Ile
               70
Pro Lys Val Leu Ala Ile Phe Trp Phe Asp Asn Lys Ser Ile Gly Phe
                            90
Ser Ser Cys Phe Leu Gln Met Phe Val Met Asn Ser Phe Leu Thr Met
         100
                         105
115
                      120
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Xaa Xaa Xaa Xaa Xaa
                  135
155
170
185
```

```
200
220
               215
230
                          235
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Gly Ser His Phe Ile Leu
                       250
Ile Leu Phe Phe Ser Thr Val Leu Leu Val Leu Val Ile Thr Asn Leu
                     265
Ala Arg Glu Arg Ile Pro Pro Asp Ile Pro Ile Leu Leu Asn Ile Leu
                  280
His His Leu Ile Pro Pro Ala Leu Asn Pro Ile Val Tyr Gly Val Arg
               295
                             300
Thr Arg Glu Ile Lys Gln Gly Ile Gln Asn Leu Leu Arg Arg Leu
             310
                          315
```

<210> 2177 <211> 322 <212> PRT

<213> Mus musculus

<400> 2177

Met Glu Leu Asp Pro Ala Val Pro Ala Leu Lys Lys Thr Leu Ser Glu 10 Pro Gly Pro Phe Val Leu Leu Gly Val Ala Glu Leu Gly Leu His 25 20 Ala Trp Phe Ser Val Pro Met Ser Leu Leu Tyr Leu Val Gly Met Ile 40 Gly His Leu Leu Gly Val Val Ala Val Asp Thr Thr Leu Gln Ala 60 Pro Met Tyr Gln Leu Leu Gly Leu Leu Ala Ala Asp Leu Ile Leu 75 Ala Thr Ser Pro Ala Pro Lys Ala Gln Ala Val Leu Trp Gly Leu Phe 90 Gly Glu Ile Ser Phe Gly Gly Trp Leu Ala Gln Cys Phe Val Val His 105 110 Val Ala Phe Thr Ala Glu Ser Ser Val Leu Pro Ala Met Ala Met Asp 120 His Ser Val Ser Ile Arg Gln Pro Leu Cys Tyr Gly Ala Leu Leu Ser 140 135 Gln His Val Val Gly Ile Val Ala Ala Ala Val Thr His Gly Ala 155 150 Arg Val Met Ala Pro Pro Val Val Leu Leu Gln Thr Leu Pro His Cys 165 170 175 Gly His Arg Ala Ser Pro His Thr Tyr Cys Glu His Met Gly Val Ala 190 185 Cys Leu Ala Cys Asp Asp Thr Cys Pro Asn Ile Trp Phe Gly Leu Ala 200 205 Thr Thr Leu Pro Ser Pro Val Leu Asp Leu Gly Leu Ile Asp Val Ser 220 215 Tyr Ala Leu His Ala Val Ser Arg Leu Leu Cys His Ser Ala His Tyr 235 230 Lys Ala Leu Gly Lys His Gly Thr His Ala Ala Gly Leu Phe Tyr Lys 255 250 245 Pro Ala Leu Phe Ser Phe Leu Ala Tyr Cys Cys Gly Leu His Thr Ile 265 Pro Ser His Ile His Ile Leu Leu Ala Asn Leu Tyr Val Val Pro

280 275 Pro Ala Met Val Val Pro Pro Phe Leu Lys Pro Val Leu Tyr Gly Val 295 300 Arg Met Gln Gln Ile Thr Gln Arg Leu Arg Leu Val Leu Gln Arg Val 315 310 305 Arg Lys <210> 2178 <211> 322 <212> PRT <213> Mus musculus <400> 2178 Met Thr Gln Gly Ser Thr Thr Ala Met Arg Gly Gln Asn Asp Ser Ser 10 5 Val Ala Glu Phe Ile Leu Leu Gly Phe Ser Asn Tyr Pro Glu Leu Gln 20 25 Arg Gln Met Phe Gly Ala Phe Leu Val Ile Tyr Leu Val Thr Leu Thr 40 Gly Asn Ala Leu Ile Met Ser Val Ile Leu Leu Asp Arg Ser Leu His 55 Ile Pro Met Tyr Leu Phe Leu Gln Asn Leu Ser Val Val Glu Thr Gly 70 75 Phe Ser Thr Thr Val Met Pro Glu Met Leu Val Val Leu Thr Ser Glu 8.5 Lys Ala Thr Ile Ser Phe Gly Gly Cys Phe Ala Gln Met Tyr Phe Ile 105 100 Leu Leu Phe Gly Gly Thr Glu Cys Phe Leu Leu Gly Ala Met Ala Tyr 120 125 Asp Arg Phe Ala Ala Ile Cys His Pro Leu Ser Tyr Pro Val Ile Met 135 140 130 Asn Lys Arg Val Phe Met Thr Leu Val Thr Cys Ser Trp Leu Ser Gly 150 155 Thr Met Met Thr Thr Leu Gln Thr Ile Trp Val Phe Ser Phe Pro Tyr 170 165 Cys Gly Ser Asn Glu Ile Asn His Ile Ser Cys Glu Thr Pro Ala Val 185 190 180 Leu Glu Leu Ala Cys Thr Asp Ile Phe Phe Phe Glu Ile Tyr Ala Phe 200 195 Thr Gly Thr Val Leu Ile Ile Leu Thr Pro Phe Val Leu Ile Leu Leu 220 215 Ser Tyr Ile Arg Ile Leu Phe Ser Ile Leu Lys Met Pro Ser Thr Thr 230 235 Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Ser Val 250 245 Thr Leu Phe Tyr Gly Thr Ala Ser Met Thr Tyr Leu Gln Pro Lys Ser 265 260 Lys Tyr Ser Pro Asp Thr Lys Lys Leu Met Ser Leu Ala Tyr Ser Leu 280 Leu Thr Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu 295 Met Lys Arg Ala Val Val Lys Leu Trp Glu Arg Lys Val Ala Leu His

Thr Thr

```
<400> 2179
Gln Phe Trp Ile Gly Phe Pro Phe Phe Thr Val Cys Leu Val Ala Leu
Leu Gly Asn Ile Ile Leu Leu Ile Ile Pro Ala Glu Arg Ser Leu
                                25
His Gln Pro Met Tyr Ile Phe Leu Ala Val Leu Ala Ala Thr Asp Ile
Gly Leu Cys Ala Ala Ile Ala Pro Lys Met Leu Ala Ile Phe Trp Phe
Arg Ala Tyr Ser Met Ala Phe Asp Ala Cys Leu Ala Gln Leu Phe Phe
                                        75
Ile His Thr Leu Gln Cys Met Glu Ser Gly Ile Leu Leu Ala Met Ala
                                    90
Phe Asp Arg Tyr Ile Ala Ile Cys Asp Pro Leu Arg His Thr Ser Ile
                                105
            100
Leu Thr Pro Ser Ile Leu Gly Arg Met Ile Val Val Val Ile Gly
        115
                            120
Ala Val Val Leu Val Gly Leu Leu Pro Ile Leu Ile Lys Arg Leu His
    130
                        135
His Phe Trp Ser Ile Gln Ile Ala His Ser Tyr Cys Glu His Met Ala
                    150
                                        155
Val Val Lys Leu Ala Ala Asp Asp Val Gln Val Asn Lys Ile Cys Gly
                                    170
                165
Leu Phe Val Gly Phe Ser Ile Leu Gly Phe Asp Met Val Phe Ile Ile
            180
                                185
Ile Ser Tyr Ala Leu Ile Phe Gln Ala Val Phe Arg Leu Lys Gln Lys
        195
                            200
Glu Ala Arg Leu Lys Ala Phe Asn Thr Cys Thr Ala His Ile Phe Val
                        215
                                            220
Phe Leu Glu Phe Tyr Ile Leu Ala Phe Phe Ser Phe Phe Ser His Arg
                    230
                                        235
Phe Gly His Val Val Pro Ser Thr His Ile Leu Leu Ser Thr Ile Tyr
                                    250
                245
Leu Leu Pro Pro Ala Leu Asn Pro Ile Val Tyr Gly Val Lys Asn
                                265
Met Val Ile Arg Lys Arg Val Ala Gln Ile Phe Phe Leu Asp His Ala
His Gln
    290
<210> 2180
<211> 230
<212> PRT
<213> Mus musculus
<400> 2180
Met Asp Lys Lys Asn Gln Thr Lys Val Thr Glu Ile Tyr Phe Ser Asp
Phe Pro Gln Phe Glu Asp Gly Gly Leu Leu Phe Ile Leu Leu Leu
                                25
Cys Val Tyr Leu Phe Ile Val Val Gly Asn Ala Val Ile Phe Leu Ala
Val Gln Leu Asp Val Arg Leu His Asn Pro Met Tyr Ser Phe Ile Ser
```

<210> 2179 <211> 290 <212> PRT

<213> Mus musculus

```
Ile Phe Ser Phe Leu Glu Ile Cys Tyr Thr Thr Val Thr Ile Pro Gln
                    70
                                        75
Met Leu Tyr Asn Leu Val Ser Lys Glu Lys Thr Ile Ser Phe Ile Gly
                                    90
Cys Leu Leu Gln Met Tyr Phe Phe His Ser Phe Gly Val Thr Glu Ser
                                105
Leu Val Leu Thr Ile Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Arg Tyr Ala Ile Ile Ile Thr Pro Lys Leu Cys Thr Gln Leu
                                            140
Ser Thr Gly Ser Phe Thr Leu Gly Phe Leu Met Leu Leu Pro Glu Ile
                    150
                                        155
Val Trp Ile Ser Thr Leu Pro Phe Cys Gly Pro Asn Gln Ile His Gln
                                    170
Leu Phe Cys Asp Leu Glu Pro Met Leu Leu Leu Ala Cys Thr Asp Thr
            180
                                                    190
Ser Met Ile Leu Val Glu Asp Val Ile His Ala Ile Ser Ile Leu Ser
                            200
Cys Val Ser Ile Ile Ser Leu Ser Tyr Leu Arg Ile Ile Thr Arg Ile
Leu Lys Ile Pro Ser Gly
<210> 2181
<211> 316
<212> PRT
<213> Mus musculus
<400> 2181
Met Asp Lys Lys Asn Gln Thr Lys Val Thr Glu Phe Tyr Phe Ser Asp
Phe Pro Gln Phe Glu Asp Gly Gly Leu Leu Phe Ile Leu Leu Leu
                                25
Cys Val Tyr Leu Phe Ile Val Val Gly Asn Ala Met Ile Phe Leu Ala
        35
Val Gln Leu Asp Val Arg Leu His Asn Pro Met Tyr Ser Phe Ile Ser
                        55
Ile Phe Ser Phe Leu Glu Ile Cys Tyr Thr Thr Val Thr Ile Pro Gln
Met Leu Tyr Asn Leu Val Ser Lys Glu Lys Thr Ile Ser Phe Ile Gly
                                    90
Cys Leu Leu Gln Met Tyr Phe Phe His Ser Phe Gly Ile Thr Glu Gly
Leu Val Leu Thr Ile Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Arg Tyr Ala Ile Ile Ile Thr Pro Lys Leu Cys Thr Gln Leu
```

Ser Thr Gly Leu Cys Thr Leu Gly Phe Leu Met Leu Leu Pro Glu Ile

Val Trp Ile Ser Thr Leu Pro Phe Cys Gly Pro Asn Gln Ile His Gln

Leu Phe Cys Asp Leu Glu Pro Val Leu Leu Leu Ala Cys Thr Asp Thr

Cys Val Ser Ile Ile Ser Leu Ser Tyr Leu Arg Ile Ile Thr Val Val

185 Ser Met Ile Leu Val Glu Asp Ile Ile His Ala Ile Ser Ile Leu Ser 200

150

165

180

210

140

220

205

155

```
Leu Lys Ile Pro Ser Gly Glu Ser Arg Gln Lys Ala Phe Ser Thr Cys
                 230
Thr Ala His Ile Thr Ile Phe Val Leu Phe Phe Gly Ser Val Ser Leu
              245
                                250
Met Tyr Leu Arg Phe Ser Val Thr Phe Gln Pro Leu Leu Glu Lys Val
                            265
          260
Ile Ala Leu Met Phe Ala Val Leu Ala Pro Phe Phe Asn Pro Ile Ile
                         280
                                           285
Tyr Ser Leu Arg Asn Lys Asp Met Lys Lys Ala Ile Lys Glu Met Phe
                     295
Cys Ser Gln Lys Val Arg Arg Leu Trp Glu Pro Met
                 310
<210> 2182
<211> 314
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (163)...(171)
<223> Any amino acid
<221> VARIANT
<222> (173)...(221)
<223> Any amino acid
<400> 2182
Met Val Ile Lys Gly Leu Gln Val Asp Asn Trp Thr Glu Thr Thr His
1
                                10
Phe Val Leu Leu Gly Phe Pro Ser Arg Pro Ala Phe Gln Phe Leu Leu
                            25
          20
Phe Ser Val Phe Leu Val Thr Tyr Leu Leu Thr Leu Ala Glu Asn Leu
                         40
                                           45
Leu Ile Ile Leu Ala Ile Arg Ser Asp Gly Gln Leu His Lys Pro Met
                     55
Tyr Phe Phe Leu Ser His Leu Ser Phe Leu Glu Met Trp Tyr Val Thr
65
                 70
                                   75
Val Ile Ser Pro Lys Met Leu Val Asp Phe Leu Ser Lys Asp Lys Ser
              85
                                90
                                                  95
Ile Ser Phe Asn Gly Cys Met Thr Gln Leu Tyr Phe Phe Val Thr Phe
                            105
                                              110
          100
Val Cys Thr Glu Tyr Ile Leu Leu Ala Val Met Ala Phe Asp Arg Tyr
       115
                         120
                                           125
Val Ala Ile Cys Asn Pro Leu Arg Tyr Pro Val Ile Met Thr Asn Gln
                     135
                                       140
Leu Cys Gly Val Met Ala Gly Gly Cys Trp Phe Cys Gly Leu Met Thr
                 150
                                    155
Ala Met Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa His Xaa Xaa Xaa
              165
                                170
                                                  175
180
                            185
                                              190
195
                         200
215
Ala Gln Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr
                  230
                                    235
                                                     240
```

```
Val Val Thr Leu Phe Tyr Ser Thr Thr Leu Phe Thr Tyr Ala Arg Pro
                                    250
Lys Leu Met Tyr Ala Tyr Asn Ser Asn Lys Val Val Ser Val Leu Tyr
                                265
            260
Thr Val Val Val Pro Leu Leu Asn Pro Ile Ile Tyr Cys Leu Arg Asn
                            280
                                                285
Arg Asp Val Lys Met Ala Leu Lys Lys Thr Ile Leu Cys Asn Arg Ser
                        295
                                            300
Gly Ser Gly Gly Asp Gly Asp Phe Ser Ser
                    310
<210> 2183
<211> 315
<212> PRT
<213> Mus musculus
<400> 2183
Met Leu Gly Gln Asn Gln Ser Trp Val Ser Glu Phe Ile Leu Ile Gly
                                    10
Phe Ser Ser Asp Pro Thr Thr Asn Ser Ile Leu Phe Ile Val Phe Leu
            20
Leu Ile Tyr Leu Ser Ser Val Leu Gly Asn Gly Leu Ile Ile Met Leu
                            40
Val Cys Leu Asp Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Cys
    50
                        55
                                            60
Thr Leu Ser Leu Leu Asp Met Gly Tyr Val Thr Thr Thr Met Pro Gln
                    70
                                        75
Met Leu Val His Leu Leu Ala His Ser Gln Thr Ile Ser Phe Ala Gly
                85
                                    90
Cys Trp Leu Gln Met Phe Val Phe Gly Ala Leu Ser Ile Thr Glu Cys
                                105
Met Ile Phe Val Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Tyr
                            120
Pro Leu Arg Tyr Thr Val Ile Leu Asn Asp Leu Cys Ile Arg Leu Ala
                        135
                                            140
Ala Gly Ser Trp Ile Cys Gly Phe Phe Ser Ser Leu Leu Asn Thr Phe
                    150
                                        155
Phe Thr Met Ser Leu Pro Tyr Cys Gly Pro Asn Asn Val Asn His Tyr
                                    170
Leu Cys Glu Gly Pro Ser Val Arg Ser Leu Ala Cys Met Asp Thr His
            180
                                185
                                                     190
Phe Val Glu Met Val Asp Leu Val Leu Ser Val Phe Val Val Val Thr
                            200
Pro Ile Ser Leu Ile Val Ala Ser Tyr Ile Arg Ile Ala Lys Ala Ile
                        215
                                            220
Leu Lys Ile Lys Ser Thr Gln Gly Arg Cys Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ala Ser His Leu Thr Val Val Thr Leu Phe Tyr Leu Pro Ala Thr Tyr
                245
                                    250
Ile Tyr Met Arg Pro Asn Ser Ser Ser Ser Glu Arg Asp Lys Gln
            260
                                265
                                                     270
Ile Ser Leu Phe Tyr Thr Ala Phe Thr Pro Leu Leu Asn Pro Val Val
                            280
Tyr Ser Leu Arg Asn Lys Asp Ile Lys Arg Ala Phe Leu Lys Val Met
                        295
                                            300
Leu Tyr Gly Arg Trp Ile Arg Gly Pro Gln Trp
```

310

```
<210> 2184
<211> 180
<212> PRT
<213> Mus musculus
<400> 2184
His Trp Gly Leu Cys Ile Arg Leu Ala Ala Gly Ser Trp Ile Cys Gly
                                    10
Phe Phe Ser Ser Leu Leu His Thr Phe Phe Thr Met Ser Leu Pro Tyr
            20
                                25
Cys Gly Pro Asn Arg Val Asn His Tyr Leu Cys Glu Gly Pro Ser Val
                            40
                                                 45
Arg Ser Leu Ala Cys Met Asp Thr His Ile Ile Glu Met Val Asp Leu
                        55
Val Leu Ser Val Phe Leu Val Val Thr Pro Ile Ser Leu Ile Val Ala
                    70
                                         75
Ser Tyr Ile Arg Ile Ala Met Ala Ile Leu Lys Ile Lys Ser Thr Glu
                8.5
                                    90
Gly Arg Cys Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Val Val
            100
                                105
                                                     110
Thr Phe Phe Tyr Ala Pro Ala Ser Tyr Ile Tyr Met Arg Pro Asn Ser
        115
                            120
                                                 125
Ser Tyr Ser Pro Glu Gln Asp Lys Gln Ile Ser Leu Phe Tyr Ser Ala
   130
                        135
                                            140
Phe Thr Pro Leu Leu Asn Pro Val Val Tyr Ser Leu Arg Asn Lys Asp
                    150
                                        155
Ile Lys Arg Ala Phe Phe Lys Val Met Gly Tyr Asp Arg Cys Ala Ser
                                    170
Gly Pro Gly Trp
            180
<210> 2185
<211> 323
<212> PRT
<213> Mus musculus
<400> 2185
Met Ala Arg Gly Asn Gln Thr Ser Ile Phe Glu Phe Leu Leu Trp Gly
                5
                                    10
Leu Ser Glu Gln Pro Gln Gln His Ile Leu Phe Leu Val Phe Leu
                                2.5
Trp Met Tyr Leu Val Thr Val Ala Gly Asn Leu Leu Ile Val Leu Ala
        35
                            40
Ile Ser Thr Asp Val Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        5.5
                                            60
Ser Leu Ser Cys Asp Asp Ile Leu Leu Val Ser Thr Ile Val Pro Lys
                    70
                                        75
Ala Leu Val Asn Ile His Thr Gln Ser Arg Thr Ile Ser Tyr Ala Gly
                85
                                    90
Cys Leu Val Gln Leu Tyr Phe Phe Leu Thr Phe Gly Asp Met Asp Ile
                                105
                                                     110
Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
                            120
                                                 125
Pro Leu His Tyr Arg Met Ile Met Ser Phe Gln Arg Cys Ser Leu Leu
```

135

Val Thr Val Cys Trp Ile Leu Thr Thr Val Val Ala Met Thr His Thr

```
Phe Leu Ile Phe Trp Phe Ser Phe Tyr Ser Lys Lys Val Ile Pro Gly
                                    170
Phe Phe Cys Asp Leu Glu Pro Leu Ile Lys Ile Pro Cys Ser Glu Thr
            180
                                185
                                                    190
Arg Ile Asn Glu Leu Val Leu Leu Phe Leu Gly Ser Ala Val Val Phe
                            200
                                                205
Ile Leu Leu Leu Ile Leu Val Ser Tyr Ile Gln Ile Val Ser Ala
                        215
Ile Phe Arg Val Pro Ser Ala Gln Gly Arg His Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ala Leu Phe Phe Gly Thr Val Ile
                                    250
Arg Ala Tyr Leu Cys Pro Ser Ser Ser Ser Ser Asn Ser Val Val Glu
                                265
Asp Thr Ala Ala Ala Val Met Tyr Thr Val Val Thr Pro Leu Leu Asn
                            280
Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Val
                        295
                                            300
Arg Ile Leu Lys Gly Lys Val Pro Phe Ser Trp Ala Gln Gly Leu Leu
                    310
                                        315
Gln Lys Lys
```

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<210> 2186

<211> 349

<212> PRT

<213> Mus musculus

<220>

<221> VARIANT

<222> (132)...(222)

<223> Any amino acid
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<400> 2186 Met Ala Arg Gly Asn Gln Thr Ser Thr Phe Glu Phe Leu Leu Trp Gly 10 Leu Ser Glu Lys Pro Gln Gln Gln His Ile Leu Phe Leu Val Phe Leu Trp Met Tyr Leu Val Thr Val Ala Gly Asn Leu Leu Ile Val Leu Ala Ile Ser Thr Asp Val Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala Thr Leu Ser Cys Val Asp Ile Leu Phe Thr Ser Thr Thr Val Pro Lys 70 75 Ala Leu Val Asn Ile His Thr Gln Ser Arg Thr Ile Ser Tyr Ala Gly 90 Cys Leu Val Gln Leu Tyr Phe Phe Leu Thr Phe Gly Asp Met Asp Ile 105 Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His 120 155 170 185

```
215
Cys Phe Ser Ser Trp Gly Val Gln Ser Ser Ser Pro Phe Leu Leu Ile
                                235
                230
Leu Met Ser Tyr Ile Arg Ile Val Ser Ala Ile Leu Arg Val Pro Ser
             245
                             250
Ala Gln Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser
         260
                          265
Val Val Ala Leu Phe Phe Gly Thr Val Ile Arg Ala Tyr Leu Cys Pro
                       280
Ser Ser Ser Ser Asn Ser Val Val Glu Asp Thr Ala Ala Ala Val
                   295
                                    300
Met Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Phe Ile Tyr Ser Leu
                310
                                315
Arg Asn Lys Asp Met Lys Gly Ala Leu Val Arg Ile Leu Lys Gly Lys
            325
                             330
Val Ser Phe Ser Trp Ala Gln Gly Leu Leu Gln Arg Lys
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<210> 2187 <211> 310 <212> PRT

<213> Mus musculus

<400> 2187

Met Lys Glu Glu Asn Glu Ser Phe Thr Thr Asp Phe Thr Leu Leu Gly 10 Val Thr Arg His Arg Glu Gln Glu Tyr Phe Phe Ile Leu Phe Leu 25 20 Phe Leu Tyr Pro Ile Thr Val Ile Glu Asn Val Leu Ile Ile Leu Ala 40 Ile His Ser Asp Thr Arg Leu His Asn Val Met Tyr Phe Phe Leu Ala 5.5 60 Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Phe Val Thr Ile Pro Lys 70 75 Met Leu Ala Asn His Leu Leu Gly Arg Lys Ala Ile Ser Phe Gly Gly 90 8.5 Cys Met Ser Gln Met Tyr Phe Met Ile Ser Leu Gly Asn Thr Asp Ser 100 105 110 Tyr Ile Leu Ala Pro Lys Ala Tyr Asp Arg Ala Val Ala Ile Ser Cys 120 125 Pro Leu His Tyr Ala Thr Ile Met Ser Ser Arg Pro Val Leu Leu Val 135 140 Ala Gly Ser Trp Val Ile Glu Asn Ala Asn Val Leu Pro His Thr Leu 150 155 Leu Thr Ala Tyr Ile Ala Leu Cys Gly Asn Lys Asp Val Ala Asn Phe 170 165 Tyr Phe Asp Ile Met Pro Leu Leu Val Ser Cys Ser Asp Ile Cys Phe 180 185 190 Asn Val Lys Met Met Tyr Leu Gly Val Gly Val Phe Ser Val Pro Leu 195 200 205 Leu Ser Phe Ile Ser Tyr Val Pro Val Phe Ser Ile Val Leu Arg Val 215 220 Pro Cys Thr Thr Gly Phe Leu Lys Ala Leu Ser Thr Cys Gly Ser His 230 235 Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly Met Tyr Phe

```
250
                245
Arg Pro Leu Thr Ser Tyr Ser Leu Lys His Ala Leu Ile Thr Val Met
                                265
                                            270
Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg
                            280
                                                285
Asn Arg Asp Met Lys Ala Ala Leu Arg Lys Leu Phe His Cys Pro Ser
                        295
                                            300
Ser Ser Ser Leu Met
<210> 2188
<211> 309
<212> PRT
<213> Mus musculus
<400> 2188
Met Arg Glu Glu Asn Glu Ser Ser Thr Thr Asp Phe Thr Leu Leu Gly
                                    10
Val Thr Arg Gln Arg Glu Gln Glu Tyr Phe Phe Phe Ile Leu Phe Leu
                                25
Phe Leu Tyr Pro Ile Thr Val Ile Glu Asn Met Leu Ile Ile Leu Ala
       35
                            40
Ile His Ser Asp Thr His Leu His Asn Thr Met Tyr Phe Phe Leu Ala
                                            60
Asn Arg Ser Leu Val Asp Ile Phe Ser Val Thr Ile Pro Lys Met Leu
                    70
Ala Asn His Leu Leu Gly Arg Lys Ala Ile Ser Phe Gly Gly Cys Met
                                    90
Ser Gln Met Tyr Phe Met Leu Ser Leu Gly Asn Thr Glu Ser Cys Ile
                                105
            100
Leu Ala Ser Val Ala Tyr Asp Ala Val Ala Ile Ser Cys Pro Leu His
                                                125
                            120
Tyr Pro Thr Ile Met Ser Pro Arg Pro Cys Val Leu Leu Val Ala Gly
                        135
Ser Trp Val Ile Ala Asn Ala Asn Val Leu Pro His Thr Leu Leu Thr
                    150
                                        155
Ala Arg Leu Ser Phe Phe Gly Asn Lys Asp Val Ala Asn Phe Tyr Cys
                                    170
Asp Ile Ile Pro Leu Leu Gln Met Ser Cys Ser Asp Ile Cys Phe Asn
                                185
                                                    190
Val Lys Met Met Tyr Leu Gly Val Arg Ile Phe Pro Val Pro Leu Leu
                            200
Cys Ile Ile Ile Ser Tyr Val Arg Val Phe Ser Thr Val Leu Arg Val
                        215
Pro Ser Thr Lys Gly Leu Leu Lys Asp Leu Ser Thr Cys Gly Ser His
                    230
                                        235
Leu Thr Val Met Phe Leu Tyr Tyr Gly Thr Val Met Val Met Tyr Phe
                245
                                    250
                                                        255
Lys His Leu Thr Ser Tyr Ser Leu Lys His Thr Leu Ile Ile Val Met
                                265
Tyr Met Thr Val Thr Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn
        275
                            280
                                                285
Arg Asp Met Lys Ala Ala Leu Lys Lys Leu Phe His Cys Pro Ser Ser
    290
                        295
                                            300
Ser Ser Ser Ile Met
305
```

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<210> 2189
<211> 348
<212> PRT
<213> Mus musculus
<400> 2189
Met Lys Glu Glu Asn Glu Ser Phe Thr Thr Asp Phe Thr Leu Leu Gly
Val Thr Arq Gln Arq Glu Gln Glu Tyr Phe Phe Ile Leu Phe Leu
                                25
Phe Phe Tyr Pro Ile Thr Val Ile Glu Asn Val Leu Ile Ile Leu Asp
Ile Phe Phe Ser Ser Ala Thr Ile Leu Lys Met Leu Ala Asn His Leu
Leu Gly Ser Lys Ala Pro Ser Ile Ser Phe Gly Glu Cys Arg Ala Gln
                    70
Met Thr Phe Met Thr Ser Leu Ala Asn Thr Asp Ser Cys Ile Leu Ala
Ala Met Val Tyr Asp Arg Ser Val Ala Ile Ser Cys Ser Leu His Tyr
                                105
            100
Ala Thr Ile Met Ser Leu Leu Cys Ala Leu Leu Asp Ala Gly Ser Trp
Val Ile Lys Ala Asn Met Leu Pro His Thr Gln Leu Thr Ala Arg Leu
                                             140
Ser Phe Cys Gly Asn Lys Asp Val Ala Ile Phe Phe Phe Phe Phe Phe
                    150
Phe Phe Phe Asp Thr Gly Phe Ser Val Pro Trp Leu Ser Trp Asn Ser
                                    170
Phe Cys Arg Thr Gly Pro Thr Gln Lys Ser Ala Cys Leu Cys Leu Ile
                                                     190
                                185
Ser Ala Gly Ile Lys Gly Val Cys His His Cys Leu Ala Cys Gly Asn
                            200
Phe Tyr Cys Asp Asn Met Pro Leu Leu Gln Leu Ser Cys Ser Asp Ile
                        215
Cys Phe Asn Val Lys Met Met Tyr Leu Gly Val Gly Val Phe Ser Val
                                         235
                    230
Pro Leu Leu Tyr Ile Ile Ser Tyr Val Arg Val Phe Ser Thr Val Leu
                                    250
Arg Val Pro Ser Thr Lys Gly Phe Leu Lys Ala Leu Ser Thr Cys Gly
                                                     270
Pro His Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Val Met
                            280
Tyr Phe Arg Pro Leu Thr Ser Tyr Ser Leu Lys His Thr Leu Ile Ile
                                             300
                        295
Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Ser
Leu Arg Asn Arg Asp Met Lys Thr Ala Leu Lys Lys Leu Leu His Gln
                325
                                    330
Met Gln Thr Leu Leu His Met Pro Ala Arg Phe Cys
            340
<210> 2190
<211> 307
<212> PRT
<213> Mus musculus
```

Met Glu Asn Lys Thr Glu Val Thr Gln Phe Phe Leu Gln Gly Leu Ala

<400> 2190

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Leu Asp Ala His Leu His Ser Pro Met Tyr Ile Phe Leu Gly Asn Leu
Ser Leu Val Asp Phe Cys Tyr Ser Ser Gly Val Thr Pro Lys Val Met
                    70
                                         75
Ala Gly Phe Leu Val Gly Asp Lys Val Met Ser Tyr Asn Asp Cys Ala
                                     90
Ala Gln Met Phe Phe Val Thr Gly Phe Ala Thr Val Glu Asn Tyr Leu
            100
                                105
Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu
        115
                            120
                                                 125
His Tyr Ala Ser Thr Met Thr Thr Ser Met Cys Ile Trp Met Ile Ala
                        135
                                             140
Gly Cys Tyr Ala Cys Gly Phe Leu Asn Ala Cys Ile Tyr Thr Gly Asp
                    150
                                         155
Ala Phe Ser Leu Ser Phe Cys Lys Ala Asp Val Val His His Phe Phe
                165
                                    170
Cys Asp Ile Pro Ala Val Met Val Leu Ser Cys Ser Asn Lys His Ile
            180
                                185
                                                     190
Asn Glu Leu Val Leu Val Cys Val Ala Ser Phe Asn Ile Phe Phe Ala
        195
                            200
Leu Ile Ile Ile Leu Ile Ser Tyr Leu Met Ile Phe Ile Thr Ile Ile
                        215
                                             220
Lys Met His Ser Ala Ser Gly His Gln Lys Ala Met Ser Thr Cys Ala
                    230
                                         235
Ser His Phe Thr Ala Val Phe Ile Phe Tyr Gly Thr Val Ile Phe Met
                245
                                     250
Tyr Leu Gln Pro Ser Ser Ser His Ala Met Asp Thr Asp Lys Thr Val
            260
                                265
                                                     270
Ser Val Phe Tyr Thr Met Val Ile Pro Leu Leu Asn Pro Leu Val Tyr
                            280
Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Arg Lys Ile Ile Phe
Arg Pro Lys
305
<210> 2191
<211> 307
<212> PRT
<213> Mus musculus
<400> 2191
Met Glu Asn Gly Thr Glu Met Val Arg Phe Ile Leu Met Gly Leu Thr
Asp Asp Pro Asp Leu Gln Leu Pro Leu Phe Ile Thr Phe Leu Leu Ile
            20
                                25
Tyr Ile Ile Thr Leu Val Gly Asn Leu Gly Leu Ile Leu Leu Ile Leu
                            40
Leu Asp Ser Gln Leu His Thr Pro Met Tyr Ile Phe Leu Ser Asn Leu
                        55
Ser Leu Val Asp Phe Cys Tyr Ser Ser Thr Val Thr Pro Lys Val Met
                    70
Ala Gly Phe Ile Ile Gly Asp Lys Met Met Ser Tyr Asn Ala Cys Ala
                                                         95
                                     90
```

10

Ser Asp Pro Gly Leu Gln Leu Pro Leu Phe Ile Ile Phe Leu Leu Ile
20 25 30
Tyr Thr Ile Thr Leu Val Gly Asn Leu Gly Met Ile Leu Leu Ile Val

```
Ser Gln Met Phe Phe Phe Ala Asn Phe Ala Asn Val Glu Asn Tyr Leu
Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu
        115
                            120
His Tyr Ala Thr Thr Met Thr Thr Arg Val Cys Ala Cys Leu Val Ile
   130
                        135
Ser Cys Tyr Ile Cys Gly Phe Leu Asn Ala Ser Ile Tyr Thr Val Asn
                    150
                                        155
Ala Leu Tyr Leu Thr Phe Cys Glu Leu Asn Val Val His His Phe Phe
                165
                                    170
                                                        175
Cys Asp Ile Pro Ala Val Met Ile Ala Ser Cys Ser His Arg His Ala
            180
                                185
                                                    190
Asn Asp Met Val Leu Ile Ser Val Ala Ser Phe Asn Ile Phe Phe Ala
        195
                            200
Leu Ile Leu Ile Leu Ile Ser Tyr Thr Phe Ile Phe Thr Asn Ile Leu
                        215
                                            220
Lys Met His Ser Asn Ser Gly Tyr Arg Lys Ala Leu Ser Thr Cys Ala
                    230
                                        235
Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe Met
                245
                                    250
Tyr Leu Gln Pro Arg Ser Ser His Ser Met Asp Thr Asp Lys Ile Ala
            260
                                265
                                                   270
Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val Tyr
                            280
                                               285
Ser Leu Arg Asn Lys Asp Val Lys Ser Ala Phe Thr Lys Ile Val Leu
                       295
Arg Ser Arg
305
<210> 2192
<211> 317
<212> PRT
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<213> Mus musculus

<400> 2192

Ile Asn Leu Val Glu Asn Ile Ser Glu Val Thr Glu Phe Ile Leu Val 10 Gly Ile Thr Asp Ala Pro Glu Leu Leu Ile Pro Leu Phe Ile Ile Phe 25 Thr Leu Ile Tyr Leu Ile Ala Leu Phe Gly Asn Leu Gly Met Ile Met 40 45 Leu Ile Leu Leu Asp Ser Arg Leu His Ser Pro Met Tyr Phe Phe Leu 55 Cys Asn Leu Pro Leu Val Asp Cys Val Tyr Ala Ser Ala Ile Thr Pro 75 Lys Val Met Glu Gly Phe Leu Thr Gly Asn Lys Ile Ile Ser Tyr Asn 90 Ala Cys Gly Ala Gln Met Phe Phe Phe Val Ala Phe Gly Ala Ile Glu 105 Ser Leu Ile Leu Ala Ser Met Ala Tyr Asp Cys Gln Ala Gly Ala Lys 120 Leu Leu His Tyr Thr Thr Ile Met Thr Ser Ser Thr Cys Ile Leu Ile Val Thr Cys Cys Tyr Met Cys Gly Ile Leu Gln Ser Ser Val His Val 150 155 Ala Leu Ala Phe Cys Leu Phe Phe Cys His Ser Asn Met Ile Asn His 170 Phe Ser Cys Asp Ile Pro Pro Leu Leu Glu Ile Ser Arg Ser Asp Thr

```
185
His Thr Asn Gly Ile Thr Pro Leu Ile Leu Ala Thr Leu Asp Leu Val
        195
                            200
Phe Thr Leu Leu Val Ile Leu Asn Thr Tyr Leu Leu Ile Phe Ile Ala
                        215
Ile Leu Arg Met His Ser Ala Glu Ala Gln Arg Lys Asp Phe Ser Thr
                    230
                                        235
Arg Val Ser His Leu Ile Thr Ala Ser Ile Phe Phe Gly Ser Leu Ile
                245
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Ser His Ser Pro Glu Ala Asp Lys
                                265
Ile Ala Ser Val Phe Tyr Thr Met Val Ile Pro Ile Met Phe Asn Pro
        275
                            280
Val Ala Tyr Ser Leu Arg Asn Ile Glu Asp Lys Cys Ala Phe Lys Lys
                        295
Val Val Gly Lys Leu Arg Thr Ser Leu His Ser Val Asn
                    310
<210> 2193
<211> 310
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (235)...(261)
<223> Any amino acid
<400> 2193
Met Glu Asn Ile Ser Glu Val Thr Glu Phe Ile Leu Val Gly Leu Thr
                                    10
Asp Ala Pro Glu Leu Gln Ile Pro Leu Phe Ile Ile Phe Thr Leu Ile
            20
                                25
Tyr Leu Ile Ala Leu Phe Gly Asn Leu Gly Met Ile Ile Leu Ile Leu
                            40
Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Cys Asn Leu
                        55
Ser Val Val Asp Cys Val Tyr Ala Ser Ala Ile Thr Pro Lys Val Ile
                                        75
Glu Gly Phe Leu Thr Gly Ser Lys Thr Ile Ser Leu Asn Gly Cys Ala
                                    90
                                                        95
Ala Gln Met Phe Phe Phe Val Ala Phe Ile Ala Ile Glu Ser Leu Ile
           100
                                105
                                                    110
Leu Ala Ser Met Ala Tyr Asp Arg His Ala Ala Val Cys Lys Pro Leu
                            120
                                                125
His Tyr Thr Thr Ile Met Thr Ser Thr Thr Cys Ile Leu Ile Val Thr
                        135
                                            140
Cys Cys Tyr Met Cys Gly Ile Leu Gln Ser Ser Val His Val Ala Leu
                    150
                                        155
Ala Phe Cys Leu Ser Phe Cys His Ser Asn Val Ile Asn His Phe Phe
                165
                                    170
Cys Asp Ile Pro Pro Leu Leu Asp Ile Ser Cys Ser Asp Thr His Thr
                                185
                                                    190
Asn Glu Ile Thr Leu Leu Val Leu Ala Thr Leu Asp Val Val Phe Thr
                            200
Leu Leu Val Ile Leu Asn Thr Tyr Leu Leu Ile Phe Ile Ala Ile Leu
                        215
Arg Met Arg Ser Ala Glu Ala Gln Arg Lys Xaa Xaa Xaa Xaa Xaa Xaa
```

```
225
                    230
                                        235
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Phe Xaa Xaa Xaa Xaa Xaa Xaa
                245
                                    250
Xaa Xaa Xaa Xaa Met Asp Thr Asp Lys Ile Ala Ser Val Phe Tyr
                                265
                                                    270
Thr Met Val Ile Pro Met Leu Asn Pro Val Val Tyr Ser Leu Arg Asn
                            280
Lys Glu Val Lys Asn Ala Phe Lys Lys Val Val Glu Arg Leu Met Ser
                        295
                                            300
Ser Phe His Leu Val His
<210> 2194
<211> 293
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (202)...(215)
<223> Any amino acid
<400> 2194
Met Gly Asn Asn Thr Asp Val Thr His Phe Leu Leu Gly Leu Thr
Asp Asp Pro Glu Leu Gln Leu Pro Leu Phe Met Ile Phe Leu Ile Ile
                                25
Tyr Thr Ile Thr Leu Val Gly Asn Leu Gly Ile Ile Leu Leu Ile Phe
                            40
Leu Asp Ser Ser Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn Leu
                        55
Ser Leu Val Asp Phe Cys Tyr Ser Ser Asp Val Thr Pro Arg Val Met
                                        75
Thr Gly Leu Leu Ile Gly Asp Lys Val Ile Ser Tyr Asn Gly Cys Ala
                85
Ala Gln Met Phe Phe Val Ala Phe Ala Thr Val Glu Asn Phe Leu
            100
                                105
Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu
        115
                            120
His Tyr Ala Thr Thr Met Thr Ser Gly Val Cys Val Cys Leu Ser Ile
    130
                        135
                                            140
Gly Ala Tyr Thr Cys Gly Phe Leu Ile Ala Ser Ile His Ile Gly Asp
                    150
                                        155
Thr Phe Ser Leu Ser Phe Cys Gly Ser Asn Val Val His His Phe Phe
                165
                                    170
Cys Asp Ile Pro Ala Val Met Ile Leu Ser Cys Ser Asp Arg His Val
            180
                                185
                                                    190
Ser Glu Leu Val Leu Phe Tyr Val Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa
        195
                            200
Xaa Xaa Xaa Xaa Xaa Xaa Val Glu Leu Ile Ser Leu Ile Ile Val
                        215
                                            220
Phe Cys His Leu Pro Ile Lys Phe Gln Asn Gly Phe His Ile Ser Ala
                    230
                                        235
Cys Gln His Arg Ser Ile Glu Lys Gly Leu Tyr Ile Gln Glu Ile Met
                                    250
Arg Ile Phe Leu Ser Phe Lys Asn Thr Ser Val Lys Ile Met Cys Ile
                                265
Leu Phe Trp Met Ile Cys Met Ser Ser Tyr Ser Gln Asp Asn Val Glu
```

275 280 285

Lys Asp Phe Lys Asn 290

<210> 2195 <211> 308 <212> PRT <213> Mus musculus

<400> 2195 Met Glu Asn Asn Thr Glu Val Thr His Phe Leu Leu Gly Leu Thr 5 10 Asp Asp Pro Glu Leu Gln Leu Pro Leu Phe Met Ile Leu Leu Ile Ile 25 Tyr Thr Ile Thr Leu Val Gly Asn Leu Gly Lys Ile Leu Leu Ile Phe Leu Asp Ser Cys Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Ser Asp Val Thr Pro Lys Val Met 70 75 Ser Gly Leu Leu Lys Gly Asp Lys Val Ile Ser Tyr Asn Gly Cys Ala 90 95 8.5 Ala Gln Met Phe Phe Val Ala Phe Ala Thr Val Glu Asn Phe Leu 105 Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu 115 120 His Tyr Ala Thr Thr Met Thr Ser Gly Val Cys Val Cys Leu Ser Ile 130 135 Gly Ser Tyr Ala Cys Gly Phe Leu Ile Ala Ser Ile His Ile Gly Asp 150 155 Thr Phe Asn Leu Ser Phe Cys Arg Ser Asn Val Val His His Phe Phe 165 170 Cys Asp Ile Pro Ala Val Met Ile Leu Ser Cys Ser Asp Arg His Val 185 190 Ser Glu Leu Val Leu Phe Tyr Val Gly Ser Phe Ser Ile Phe Phe Leu 200 195 Leu Ser Leu Val Ile Cys Ile Ser Tyr Ile Phe Ile Phe Ile Thr Ile 215 Phe Lys Met His Ser Asn Ala Gly Tyr Gly Lys Ala Val Ser Thr Cys 230 235 Ala Ala His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Gly Ile Phe 250 Met Tyr Leu Gln Pro Ser Ser Ser His Ser Met Asp Thr Asp Lys Ile 265 270 Thr Ser Val Phe Tyr Thr Met Ile Ile Pro Met Leu Asn Pro Leu Val 280 Tyr Ser Met Arg Asn Lys Glu Val Lys Arg Ala Phe Thr Asn Val Phe 290 295 300 His Lys Ala Lys 305

<210> 2196

<211> 289

<212> PRT

<213> Mus musculus

<220>

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<221> VARIANT
<222> (156)...(157)
<223> Any amino acid
<400> 2196
Met Thr Pro Leu Lys Asn Trp Thr Glu Val Thr His Phe Leu Leu Leu
1
Gly Leu Thr Asp Asp Pro Gly Leu Gln Leu Pro Leu Phe Ile Ile Phe
                                25
Leu Leu Ile Tyr Ile Phe Thr Leu Val Gly Asn Leu Gly Leu Ile Leu
Leu Ile Leu Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
Gly Asn Leu Ser Leu Val Asp Val Phe Tyr Ser Ser Ala Ile Thr Pro
                                         75
Lys Val Met Ala Gly Leu Leu Gly Asp Lys Ile Ile Ser Tyr Asn
                                    90
                                                         95
Ser Cys Ala Ala Gln Met Phe Val Phe Ala Thr Phe Ala Thr Val Glu
                                105
            100
Asn Tyr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys
                            120
Lys Pro Leu His Tyr Ala Thr Thr Met Thr Pro Ser Val Cys Met Cys
                        135
                                             140
Leu Ile Met Gly Cys Tyr Xaa Xaa Xaa Phe Xaa Xaa Phe Cys Asp
                    150
                                        155
                                                             160
Met Pro Ala Leu Met Ala Leu Ser Cys Ser Asp Arg His Ile Asn Glu
                                    170
                165
Leu Val Leu Ile Tyr Leu Ala Ser Phe Thr Leu Phe Phe Ala Leu Ile
            180
                                185
                                                     190
Ile Ile Leu Val Ser Tyr Thr Ile Ile Phe Ile Thr Ile Leu Asn Met
                            200
His Thr Gly Ala Gly Leu Gln Lys Ala Ile Ser Thr Cys Ala Ser His
                        215
Phe Ile Ala Val Phe Ile Phe Tyr Gly Thr Thr Ile Phe Met Tyr Leu
225
                                                             240
Gln Pro Ser Ser Arg His Ser Met Asp Thr Asp Lys Ile Val Ser Val
                                    250
Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val Tyr Ser Leu
                                                     270
Arg Asn Lys Glu Val Lys Ser Ala Phe Met Lys Trp Ile Leu Lys Glu
        275
                            280
Lys
<210> 2197
<211> 314
<212> PRT
<213> Mus musculus
<400> 2197
Met Lys Lys Asn Ile Glu Glu Ser Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Lys Ser Pro Glu Leu Gln Val Leu Leu Leu Met Ile Leu Thr Phe Ile
            20
                                25
```

<221> VARIANT

<222> (151)...(154) <223> Any amino acid

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Tyr Ala Ile Thr Leu Thr Gly Asn Leu Gly Met Phe Leu Leu Ile Leu
Leu Asp Ala His Leu His Thr Pro Met Tyr Phe Phe Leu Arg Asn Leu
Ser Leu Val Asp Phe Gly Ser Ser Ser Thr Val Thr Pro Lys Val Met
Ala Gly Leu Leu Thr Gly Ser Asn Val Ile Ser Tyr Asn Thr Tyr Ala
Val Leu Met Phe Phe Phe Val Phe Phe Ala Thr Val Asp Ser Tyr Leu
           100
                                105
Leu Ala Ser Ile Ser Met Ala Tyr Asp Gly Tyr Ala Ala Val Cys Lys
       115
                            120
                                                125
Pro Leu His Tyr Thr Thr Met Thr Lys Gly Val Cys Thr Cys Leu
                        135
Ala Ile Ser Ser Tyr Ile Phe Gly Ile Leu Asn Ala Ser Ile Gln Ile
                    150
                                        155
Ile Phe Gly Leu Pro Phe Cys Gly Tyr Asn Val Ile Asn His Leu Phe
                165
                                    170
Cys Asp Ile Pro Ala Val Arg Ile Leu Ala Cys Ser Asp Lys His Val
           180
                                185
                                                    190
Asn Glu Met Ile Leu Ile Leu Val Ser Ser Phe His Ile Ile Phe Val
                            200
       195
Phe Leu Val Ile Leu Ile Ser Tyr Leu Leu Ile Phe Leu Tyr Ile Leu
                        215
                                            220
Lys Met His Ser Ser Glu Gly Tyr His Lys Ala Phe Ser Thr Cys Ala
                    230
Ser His Val Thr Ala Val Phe Thr Phe Tyr Gly Thr Val Thr Ile Val
                                    250
                245
Tyr Leu Lys Pro Ser Ala Asn His Ser Ile Asp Thr Asp Lys Phe Val
            260
                                265
                                                    270
Ser Val Ile Tyr Thr Met Val Ile Pro Met Leu Asn Pro Met Val Tyr
                            280
Ser Leu Thr Asn Lys Glu Val Lys Asn Ala Leu Lys Asn Ile Phe Gln
                        295
Lys Ala Lys Leu Tyr Val Tyr Met Leu Tyr
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<210> 2198

<211> 369

<212> PRT

<213> Mus musculus

<400> 2198

 Met
 Thr
 Met
 Glu
 Asn
 Arg
 Thr
 Glu
 Val
 Thr
 Gln
 Phe
 Ile
 Leu
 Ser

 Arg
 Leu
 Thr
 Asp
 Asp
 Pro
 Ser
 Leu
 Gln
 Leu
 Pro
 Pro
 Ile
 Leu
 Pro
 Ile
 Leu
 Gly
 Pro
 Ile
 Ile

```
120
His Ala Thr Leu Ile Thr Lys Gly Val Phe Val Tyr Ile Ile Ile Asn
                        135
                                            140
Cys Tyr Ile Phe Asp Phe Met Lys Asp Phe Phe Val Val Val Phe Leu
                    150
                                        155
Arg Gln Gly Phe Ser Val Pro Leu Ser Trp Asn Ser Leu Cys Arg Pro
                165
                                    170
                                                         175
Gly Trp Pro Gln Thr Leu Lys Ser Thr Cys Leu Cys Leu Pro Ser Thr
                                185
                                                     190
Gly Ile Lys Gly Val Cys His His Cys Leu Ser Met Asn Glu Phe Leu
        195
                            200
Phe Ile Gly Asp Thr Leu Tyr Gln Phe Ser Phe Tyr Phe Cys Lys Phe
                        215
                                            220
Asn Val Ile Tyr His Leu Phe Phe Tyr Met Pro Ala Ile Met Tyr Val
                    230
                                         235
Ser Ser Asp Arg His Val Asn Glu Leu Val Ser Val Cys Leu Ala Ser
                245
                                    250
Phe Asn Ile Phe Phe Cys Ser His Asn Tyr Leu Leu Ser His Ile Ile
Ile Phe Ile Gly Ile Leu Arg Met His Ser Gly Thr Gly His Gln Lys
                            280
Ser Ile Ser Thr Cys Ala Ser His Ile Ile Pro Val Thr Ala Phe Tyr
                        295
Gly Thr Leu Ile Phe Met Tyr Leu Gln Ser Ser Ser His Ala Met
                    310
                                         315
Asn Thr Asp Lys Thr Val Ser Val Phe Tyr Thr Met Val Ile Pro Met
                                    330
                325
Phe Asn Pro Val Val Tyr Ser Leu Arg Asn Lys Ile Lys Val Ala Phe
                                345
Arg Lys Ile Val Leu Met Glu Lys Lys Leu Phe Val Tyr Asn Phe Asn
                            360
Ile
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<210> 2199 <211> 312 <212> PRT

<213> Mus musculus

<400> 2199

Met Ile Lys Glu Arg Asn Phe Thr Glu Ile Thr Glu Phe Ile Leu Leu 1 10 Gly Phe Ser Asp Phe Pro Gln Ile Thr Ala Leu Leu Phe Val Met Phe Leu Ile Leu Tyr Ile Thr Thr Leu Thr Trp Asn Leu Ser Leu Val Val Leu Ile Arg Met Asp Ser Tyr Leu His Thr Pro Met Tyr Phe Phe Leu 55 Ser Asn Leu Ser Phe Ile Asp Ile Cys Tyr Ile Ser Ser Thr Val Pro 70 75 80 Lys Met Leu Ser Asn Leu Phe Gln Glu Lys Gln Thr Ile Ser Phe Val 85 90 Gly Cys Ile Val Gln Tyr Phe Met Phe Ala Thr Met Gly Leu Ser Glu 100 105 110 Ser Cys Leu Met Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys 120 125 Asn Pro Leu Leu Tyr Ser Ser Val Met Ser Pro Thr Leu Cys Ala Gln 135 140

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.Met Val Met Gly Ser Tyr Thr Ala Gly Ile Met Gly Ser Leu Ser Gln
                    150
                                         155
Val Cys Ala Leu Leu Gln Leu His Phe Cys Gly Pro Asn Val Ile Arg
                                     170
                                                         175
His Phe Phe Cys Asp Met Pro Gln Leu Leu Asn Leu Ser Cys Thr Asp
                                 185
                                                     190
Thr Phe Phe Ala Gln Val Val Leu Leu Ile Leu Thr Met Leu Phe Cys
                             200
                                                 205
Ile Ser Asn Ala Leu Val Ile Ile Ile Ser Tyr Gly Tyr Ile Val Leu
                         215
                                             220
Ser Ile Leu Lys Ile Thr Ser Ala Lys Gly Arg Ser Lys Ala Phe Asn
                    230
                                         235
Thr Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Tyr Thr Ser Ser
                                     250
Ala Phe Val Tyr Leu Ser Ser Ser Gly Gly Ser Ser Ser Phe Asp
                                 265
                                                     270
Arg Phe Val Ser Val Phe Tyr Thr Val Leu Ile Pro Met Leu Asn Pro
                             280
                                                 285
Leu Val Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala Gly Lys Arg
                                             300
                         295
Leu Gln Lys Lys Leu Gly Cys Cys
                     310
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<210> 2200 <211> 319 <212> PRT

<213> Mus musculus

<400> 2200

Met Ala Gly Gly Arg Asn Ser Thr Val Val Thr Arg Phe Ile Leu Leu Gly Phe Ser Asp Gln Pro Gln Met Lys Ile Phe Leu Phe Met Leu Phe 20 25 Leu Gly Ile Tyr Ile Leu Thr Leu Ala Trp Asn Leu Ser Leu Ile Thr 40 Leu Ile Arq Met Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu 55 Ser Asn Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Ser Thr Ala Pro 70 75 Lys Met Leu Ser Asp Ile Val Thr Asp Lys Asn Thr Ile Ser Phe Leu 90 85 Gly Cys Ala Thr Gln Tyr Phe Val Phe Cys Gly Met Gly Leu Thr Glu 105 Cys Leu Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Thr Ala Val Cys 120 Asn Pro Leu Leu Tyr Met Ala Leu Met Ser His Thr Leu Cys Leu Lys 140 135 Leu Val Ala Gly Ala Tyr Met Gly Gly Phe Leu Ser Ser Leu Ile Ala 150 155 Thr Cys Ser Ile Tyr Gln His Asp Phe Cys Gly Pro Asn Ile Ile Asn 165 170 175 His Phe Phe Cys Asp Leu Pro Pro Val Leu Ala Leu Ala Cys Ser Asp 180 185 190 Ile Phe Thr Ser Gln Val Val Thr Phe Ile Leu Gly Val Ile Val Gly 195 200 205 Val Met Ser Val Leu Val Val Leu Ile Ser Tyr Gly Tyr Ile Ile Ala 215 220 Ala Val Leu Arg Ile Asn Ser Ala Lys Gly Arg Thr Lys Ala Phe Ser

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230
                                        235
225
Thr Ser Ala Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Ser Gly
                245
                                    250
Leu Phe Met Tyr Met Arg Pro Asn Ser Ser Tyr Ser Leu Gly Gln Asp
            260
                                265
Lys Val Ala Ser Val Phe Tyr Ala Val Val Pro Met Met Asn Pro
                            280
Ile Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Asn Ala Val Arg Lys
                        295
                                            300
Ala Val Glu Arg Asp Ser Met Leu Ser His Gly Tyr Ser Phe Phe
                    310
<210> 2201
<211> 294
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (158)...(164)
<223> Any amino acid
<400> 2201
Val Ile Ile Tyr Pro Val Phe Thr Glu Leu Val Cys Pro Ser Pro Leu
                                    10
Asp Glu Lys Leu Ser Arg Glu Ala Ile Leu Phe Ala Tyr Met Met Leu
            20
                                25
Ser Thr Pro Pro Leu Tyr Val Ile Ser Lys Ile Ser Leu Ser Pro Thr
                            40
Ala Phe Ile Pro Ser Ser Leu Ser His Ala Ser Cys Ser Phe Tyr Ala
                        55
Gly Lys Ala Arg Ala Gln Asn Cys Cys Arg Glu Asn Phe Gly Phe Phe
                                        75
                    70
Lys Asn Thr Asp Lys Leu Ser Glu Tyr Ile Phe Val Ser Ile Pro Asp
                85
                                    90
Val Gly Tyr Trp Gly Ala Ser Gly Cys Pro His Gln Leu Thr Thr Leu
            100
                                105
                                                    110
Ser Ser Ala Leu Ala Gly Val Ser Tyr Leu Pro Ala Glu Asp Ser Leu
                            120
                                                125
Cys Leu Glu Phe Trp Gly Leu Leu Arg Glu Phe Glu Asn Thr Asn Ala
                        135
                                            140
Glu Gly Leu Ala Ala Val Val Pro Leu Gln Val Leu Leu Xaa Xaa Xaa
                    150
                                        155
Xaa Xaa Xaa Pro Leu Ser Cys Ser Asp Pro Phe Ile Ser Gln Leu
                165
                                    170
Val Leu Phe Leu Ala Ala Leu Phe Val Gly Phe Gly Ser Phe Leu Val
            180
                                185
                                                    190
Ile Ile Phe Ser Tyr Val Phe Ile Ala Val Ser Ile Leu Lys Val Ala
       195
                            200
                                                205
Ser Phe Lys Gly Arg Val Lys Ala Phe Lys Thr Cys Gly Ser His Leu
                        215
                                            220
Ala Ala Val Thr Leu Phe Tyr Gly Thr Val Phe Ser Val Tyr Met His
                    230
                                        235
His Ser Ser Gln His Ser Thr Lys Gln Asp Lys Val Leu Ser Val Val
                                    250
Tyr Thr Ile Leu Ile Pro Met Val Asn Pro Leu Ile Tyr Ser Leu Arg
```

Asn Thr Glu Ile Lys Glu Ala Leu Lys Arg Val Leu Lys Lys Ala Ala

275 280 285 His Leu Pro Gln Lys Ala 290 <210> 2202 <211> 302 <212> PRT <213> Mus musculus <400> 2202 Phe Ser Trp Gly Phe Pro Gly Ser Trp Glu Glu Gln Ile Phe Leu Phe 10 Val Leu Phe Leu Val Phe Tyr Val Leu Thr Leu Leu Gly Asn Gly Ala Ile Ile Cys Ala Val Arg Cys Asp Ser Arg Leu His Thr Pro Met Tyr 35 40 Phe Leu Leu Gly Asn Phe Ala Phe Leu Glu Ile Trp Tyr Val Ser Ser 55 Thr Thr Pro Asn Thr Leu Ala Asn Ile Leu Ser Lys Thr Lys Thr Ile 75 Ser Phe Ser Gly Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser Leu Gly 90 85 Thr Thr Glu Cys Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Leu 100 105 110 Ala Ile Cys Arg Pro Leu His Tyr Pro Thr Ile Met Thr Arg Arg Leu 115 120 125 Cys Cys Ile Leu Val Ser Ser Cys Trp Leu Ile Gly Phe Leu Gly Tyr 135 140 Pro Ile Pro Val Phe Ser Ile Ser Gln Leu Pro Phe Cys Gly Ser Asn 150 155 Ile Ile Asp His Phe Leu Cys Asp Met Asp Pro Leu Met Ala Leu Ser 165 170 175 Cys Val Pro Ala Pro Ile Thr Lys Leu Met Leu Tyr Val Gln Asn Ser 180 185 190 Leu Phe Leu Phe Phe Thr Ile Ala Tyr Ile Leu Gln Ser Tyr Ile Leu 195 200 Leu Leu Lys Ala Ile Phe Gln Val Pro Ser Ala Ala Gly Arg Arg Lys 215 Ala Phe Ser Thr Cys Gly Ser His Leu Val Val Val Ser Leu Phe Tyr 230 235 Gly Thr Val Met Ile Met Tyr Met Ser Pro Thr Tyr Gly Ile Ser Thr 245 250 255 Leu Met Gln Lys Ile Leu Thr Leu Val Tyr Ser Val Met Thr Pro Leu 270 Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Leu Ala Leu Arg Lys Val Leu Leu Gly Met Arg Ile Val Lys Asn Ile 290

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<210> 2203
<211> 318
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (177)...(183)
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<400> 2203

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Met Lys Thr Leu Asn Ser Pro Ser Asn Ser Ser Thr Ile Thr Gly Phe
Ile Leu Leu Gly Phe Pro Cys Pro Arg Glu Gly Gln Ile Leu Leu Phe
                                25
Val Thr Phe Phe Val Val Tyr Leu Leu Ile Leu Met Gly Asn Ala Ser
Ile Ile Cys Ala Val Tyr Cys Asp Gln Arg Leu His Thr Pro Met Tyr
                        55
Leu Leu Leu Ala Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Thr Ser
                    70
Thr Val Pro Asn Met Leu Ala Asn Phe Leu Ser Asp Thr Lys Val Ile
                                     90
Ser Phe Ser Gly Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser Phe Gly
                                105
Ser Thr Glu Cys Phe Phe Leu Ala Val Met Ala Phe Asp Arg Tyr Leu
                                                 125
                            120
Ala Ile Cys Arg Pro Leu His Tyr Pro Ser Leu Met Thr Arg His Leu
                        135
Cys Asn Thr Leu Val Ile Ser Cys Trp Val Leu Gly Phe Leu Trp Phe
                    150
                                         155
Pro Val Pro Ile Ile Ile Ser Gln Met Ser Phe Trp Trp Val Gln
                                     170
Xaa Xaa Xaa Xaa Xaa Xaa Ile Ile Asp His Phe Leu Cys Asp Pro
                                185
                                                     190
Gly Pro Leu Leu Ala Leu Ala Cys Ser Arg Ala Pro Leu Met Glu Val
        195
                            200
                                                 205
Phe Trp Thr Ile Ile Met Ser Ile Leu Leu Val Ile Pro Phe Leu Phe
                        215
Ile Met Gly Ser Tyr Ile Leu Val Leu Arg Thr Val Phe Arg Leu Pro
                    230
                                         235
Ser Arg Asp Gly Gln Lys Lys Ala Phe Ser Thr Cys Gly Ser His Val
                                     250
Thr Val Val Ser Leu Phe Tyr Gly Ser Val Met Ile Met Tyr Met Ser
                                265
                                                     270
Pro Thr Ser Gly His Glu Ala Gly Met Gln Lys Ile Val Thr Leu Phe
        275
                            280
Tyr Ser Val Gly Thr Pro Leu Leu Asn Pro Val Ile Tyr Ser Leu Arg
                        295
                                             300
Asn Lys Asp Met Lys Asn Ala Leu Gln Lys Ile Leu Arg Thr
                    310
<210> 2204
<211> 142
<212> PRT
<213> Mus musculus
<400> 2204
Met Asn Val Ser Glu Gly Ser Thr Val Thr Tyr Phe Val Leu Leu Gly
                                     10
Phe Pro Gly Pro Trp Lys Ile Gln Ile Thr Leu Phe Ser Leu Ile Leu
Leu Leu Tyr Met Ile Thr Leu Thr Gly Asn Met Ala Ile Ile Cys Ala
                            40
Val Arg Trp Asn Gln Gln Leu His Thr Pro Met Tyr Met Phe Leu Ala
                                             60
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Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Thr Cys Thr Val Pro Asn
Met Leu Val Asn Ser Leu Ser Lys Thr Lys Thr Ile Ser Phe Thr Gly
                                    90
Cys Phe Thr Gln Phe Tyr Phe Phe Phe Ser Leu Gly Thr Thr Glu Cys
            100
                                105
Phe Phe Leu Cys Ala Met Ala Tyr Asp Arg Tyr Leu Thr Ile Cys Tyr
                            120
Pro Leu His Tyr Pro Ser Ile Met Thr Arg Gln Phe Cys Ser
                        135
<210> 2205
<211> 304
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (81)...(90)
<223> Any amino acid
<400> 2205
Met Asn Ser Ser Ser Thr Ser Asp Phe Ile Leu Leu Gly Leu Ser Thr
Asn Pro Trp Met Gln Lys Pro Leu Phe Gly Ile Phe Ile Ile Met Tyr
                                25
Leu Val Thr Val Met Gly Asn Val Leu Ile Ile Leu Val Ile Arg Ser
                            40
Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser
                        55
Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val Pro Lys Met Leu Val
                                        75
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Leu Val Gln Met Tyr
Phe Phe Leu Ala Leu Ala Asn Thr Asp Ser Tyr Leu Leu Ala Ser Met
                                105
```

Ala Ile Asp Arg Leu Val Ala Ile Cys Asn Pro Leu His Tyr Asp Val 115 120 125 Val Met Arg Ser Gln Arg Cys Leu Leu Met Leu Leu Gly Ser Cys Thr 135 140 Ile Ser His Leu His Ala Leu Phe Arg Val Leu Leu Met Ser Arg Leu 150 155 Ser Phe Cys Ala Ser His Val Ile Lys His Phe Phe Cys Asp Thr Gln 170 Pro Val Leu Lys Leu Ser Cys Ser Asp Thr Ser Ser Ser Gln Ile Val 180 185 190 Val Met Thr Glu Thr Leu Ala Val Ile Val Thr Pro Phe Leu Cys Ile Leu Phe Ser Tyr Met Lys Ile Ile Val Thr Val Leu Arg Ile Pro Ser 215 220 Ala Ala Gly Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr 230 235 Val Val Ala Leu Phe Tyr Gly Ser Val Ile Tyr Val Tyr Phe Arg Pro 250 Leu Ser Met Tyr Ser Val Val Lys Asp Arg Ile Ala Thr Val Met Tyr 260 265 Thr Val Val Thr Pro Met Met Asn Pro Phe Ile Tyr Ser Leu Arg Asn 280 285

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Lys Asp Met Lys Arg Gly Leu Arg Lys Leu Lys Asp Arg Leu His Ser
   290
                      295
                                         300
<210> 2206
<211> 297
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (255)...(285)
<223> Any amino acid
<400> 2206
Met Leu Arg Glu Asn Gln Ser His Met Thr Glu Phe Leu Leu Gly
Leu Thr Ser Asn Pro Lys Gln Gln Val Trp Leu Phe Ala Ser Phe Leu
Ala Met Tyr Leu Val Asn Val Ile Gly Asn Ser Val Ile Ile Ala Ser
       35
Ile Gln Arg Asp Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ser Leu Val Asp Ile Cys Phe Thr Thr Val Ile Val Pro Gln
                  70
Met Leu Val Asn Leu Leu Thr Gln Arg Lys Thr Ile Leu Phe Ala Gln
                                 90
Cys Leu Thr Gln Met Tyr Phe Phe Val Ala Phe Gly Ile Thr Asp Ser
           100
                              105
Phe Leu Leu Ala Ala Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Asn
                          120
                                             125
Pro Leu His Tyr Asn Thr Val Met Ser Pro Arg Arg Cys Arg Leu Leu
                      135
                                         140
Val Val Ala Ser Trp Ala Val Ser His Leu His Ser Leu Thr His Thr
                  150
                                     155
Ile Leu Met Gly Arg Leu Ser Phe Cys Gly Pro Asn Val Ile His His
               165
                                 170
Phe Phe Cys Asp Val Gln Pro Leu Leu Thr Leu Ser Cys Ser Asp Thr
           180
                              185
                                                190
Ser Ile Asn Glu Leu Leu Ala Phe Thr Glu Gly Ser Val Val Ile Met
       195
                          200
Ser Pro Phe Ser Leu Leu Gly Gly Ser Tyr Ile Tyr Ile Thr Arg Thr
                      215
                                         220
Val Leu Arg Val Pro Ser Gly Glu Gly Arg Asp Lys Val Phe Ser Thr
                  230
                                     235
Cys Gly Ser His Leu Thr Val Val Ala Leu Val Tyr Gly Thr Xaa Xaa
                                                    255
280
Ala Leu Arg Lys Leu Ala Lys Arg Thr
   290
                      295
<210> 2207
<211> 165
<212> PRT
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<213> Mus musculus

```
<400> 2207
Met Lys Phe Thr Glu Ile Arg Ala Glu Asp Asn Ala Ser Thr Val Thr
                                    10
Glu Phe Leu Leu Gly Phe Ser Asp Leu Pro Asn Leu Gln Gly Ile
                                25
Leu Phe Gly Met Phe Ser Ile Ile Tyr Leu Ile Ile Leu Val Gly Asn
Ser Phe Ile Ile Val Ile Thr Arg Ile Asp Pro Ala Leu Gln Lys Pro
                        55
Met Tyr Phe Phe Leu Ala Asn Phe Ser Ser Leu Glu Ile Cys Tyr Val
                    70
                                        75
Ser Val Thr Leu Pro Arg Ile Leu Phe Ser Ile Ala Ala Gln Glu Arg
                                    90
Lys Ile Ser Val Leu Ser Tyr Ala Thr Gln Leu Cys Phe Phe Leu Met
                                105
Leu Gly Ala Thr Glu Cys Phe Leu Leu Ala Val Met Ser Tyr Asp Arg
                            120
Tyr Val Ala Ile Cys Asn Pro Leu His Tyr Pro Leu Val Met Asn Pro
                        135
Thr Lys Cys Thr Gln Leu Ala Ala Ala Ser Trp Leu Gly Gly Ile Pro
                                        155
Val Gln Ile Gly Gln
                165
<210> 2208
<211> 143
<212> PRT
<213> Mus musculus
<400> 2208
Lys Phe Thr Thr Ser Thr Asp Glu Asp Leu Phe Lys Gln Glu Lys Leu
Asn Ala Ser Thr Leu Met Glu Phe Thr Leu Leu Gly Phe Ser Asn Val
Pro His Leu Gln Val Leu Phe Met Val Phe Leu Phe Met Tyr Met Thr
Ile Leu Leu Trp Asn Ser Ile Ile Ile Val Leu Ala Lys Thr Asp Pro
Ala Leu Gln Thr Pro Ile Tyr Phe Phe Leu Ser Asn Phe Ser Phe Leu
                    70
Glu Ile Cys Tyr Val Thr Val Thr Ile Pro Arg Met Leu Met Asp Leu
                                    90
Tyr Thr Leu Lys Gly Asn Ile Ser Val Phe Ala Cys Ala Thr Gln Met
            100
Tyr Phe Val Leu Met Leu Gly Ala Thr Glu Cys Leu Leu Ala Ala
                            120
Met Ala Tyr Asp Arg Tyr Val Gly Tyr Leu Pro Pro Ser Pro Ile
    130
                        135
<210> 2209
<211> 164
<212> PRT
<213> Mus musculus
```

<220>

<221> VARIANT

<222> (131)...(137) <223> Any amino acid <400> 2209 Met Gln Ser Lys Tyr V

Met Gln Ser Lys Tyr Val Asn Leu Gln Arg Ala Asn Lys Phe Lys Ile Thr Asp Thr Asn Leu Ser Val Pro Ile Glu Phe Val Leu Leu Gly Phe Ser Asp Ile Pro Gln Leu His Trp Phe Leu Phe Gly Ile Phe Phe 40 Ile Tyr Met Ser Ile Leu Leu Gly Asn Gly Leu Ile Ile Leu Ile Thr 55 Arg Val Glu Pro Thr Leu Gln Thr Pro Met Tyr Phe Phe Ile Ser Asn Leu Ser Phe Leu Glu Ile Cys Tyr Val Ser Val Thr Leu Pro Arg Met Leu Met Asp Leu Phe Thr Leu Lys Gly Asn Ile Ser Phe Leu Ala Cys 100 105 Ala Thr Gln Met Cys Leu Phe Leu Ile Leu Gly Gly Thr Glu Cys Phe 115 120 125 Leu Leu Xaa Xaa Xaa Xaa Xaa Xaa Met Met Ile Cys Ala Tyr Cys 135 140 Val Leu Cys Phe Val Gln Leu Ile Cys Leu Gly Gly Leu Leu His Ser 150 155 Gly Ile Gln Lys

<210> 2210 <211> 297 <212> PRT

<213> Mus musculus

<400> 2210

Ala Arg Glu Ile Ala Pro Ser Leu Asp Glu Phe Ile Phe Leu Gly Ile 10 Thr Asn Asn Pro Phe Ile Thr Leu Leu Leu Val Tyr Leu Ile Asn Leu 25 Leu Ala Asn Leu Gly Met Ile Ile Leu Thr Arg Val Asp Thr Gln Leu 40 45 His Thr Pro Met Tyr Phe Phe Leu Arg His Leu Ser Phe Cys Asp Leu 55 Cys Tyr Ser Thr Ala Ile Gly Pro Lys Met Leu Val Asn Leu Leu Ala 70 75 Glu Glu Lys Phe Ile Ser Thr Gly Gly Cys Ala Leu Gln Phe Phe Thr 90 Leu Cys Ala Phe Val Asp Ser Glu Cys Leu Leu Leu Ala Val Thr Ala 100 105 110 Tyr Asp Arg Tyr Gln Ala Ile Ser Asn Pro Leu Leu Tyr Thr Val Asn 120 125 Met Phe Ser Arg Leu Cys Ser Leu Leu Met Ala Gly Val Tyr Leu Val 135 140 Gly Thr Ala Asp Thr Leu Ile His Thr Thr Leu Ala Phe Ser Leu Cys 150 155 Phe Cys Asp Ile Asn Gln Phe Phe Cys Asp Val Pro Ser Leu Val Leu 170 175 Ile Ser Cys Ser Glu Thr Glu Val Asn Glu Ala Ile Ser Thr Ile Leu Phe Ile Glu Leu Asn Ile Ile Ser Gly Leu Leu Val Ser Tyr Cys Tyr

```
195
                            200
                                                 205
Ile Ile Ser Ser Val Phe Lys Ile Cys Ser Ala Asp Gly Ser Phe Lys
                        215
                                             220
Ala Phe Ser Thr Tyr Ala Ser His Leu Thr Val Ala Val Phe Leu Gly
                    230
                                         235
Thr Leu Leu Phe Met Tyr Phe His Leu Asn Ser Ser Tyr Phe Leu Asp
                                     250
Gln Asp Lys Ile Thr Ser Leu Phe Tyr Thr Leu Val Ile Leu Met Leu
                                265
Asn Pro Leu Ile Ser Leu Arg Asn Asp Met Lys Glu Ala Leu Glu Gly
                            280
Trp Asp Gly Ser Val Gly Lys Ser Thr
    290
                        295
<210> 2211
<211> 301
<212> PRT
<213> Mus musculus
<400> 2211
Thr Arg Thr Arg Ile Thr Glu Val Ile Leu Leu Gly Phe Gln Val Asp
Pro Phe Leu Glu Met Leu Leu Phe Gly Leu Phe Leu Leu Phe Asn Cys
                                25
Leu Thr Leu Met Gly Asn Gly Ile Ile Leu Gly Leu Ile Cys Leu Asp
Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu Ala Ile
Val Asp Met Ser Tyr Ala Ser Ser Thr Ala Ala Pro Lys Met Leu Thr
                    70
Asn Met Val Met His Gln Lys Ser Ile Ser Phe Ala Ser Cys Ile Leu
                                     90
His Thr Phe Leu Tyr Leu Ala Phe Ala Val Thr Glu Cys Leu Ile Leu
                                105
Val Val Met Ser Tyr Asp Arg Phe Val Val Ile Cys His Pro Leu Lys
                            120
Tyr Thr Leu Ile Met Ser Trp Arg Val Phe Val Ile Leu Ala Ala Thr
                        135
                                             140
Cys Trp Val Phe Ser Phe Leu Leu Ala Leu Thr His Thr Thr Leu Ile
145
                                         155
Leu Arg Leu Pro Phe Cys Gly Pro Gln Asn Val Asn His Phe Phe Cys
                                     170
Gln Ile Met Ser Val Phe Arg Leu Ala Cys Ala Asp Thr Arg Leu Asn
Val Ile Leu Phe Ala Gly Ser Val Met Val Leu Leu Gly Ser Leu Cys
                            200
                                                 205
Leu Val Leu Val Ser Tyr Thr Arg Ile Leu Val Ala Ile Leu Gly Ile
                        215
His Ser Gly Gly Leu Arg Lys Thr Phe Thr Arg Ser Ser Cys Leu Cys
                    230
                                         235
Val Val Gly Leu Phe Phe Gly Cys Ala Ile Ala Lys Tyr Leu Ala His
                                    250
Lys Ser Asn His Ser Gln Glu Glu Arg Lys Ile Leu Ser Leu Phe Tyr
                                265
                                                     270
Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile Tyr Asn Leu Arg Asn
                            280
Thr Glu Val Lys Gly Ala Leu Arg Arg Ala Leu Trp Thr
                        295
                                             300
```

```
<212> PRT
<213> Mus musculus
<400> 2212
Met Asn Gln Thr Trp Ile Thr Glu Val Ile Leu Leu Gly Phe Gln Val
Asp Pro Ser Leu Glu Met Leu Leu Phe Gly Leu Phe Leu Leu Phe Tyr
            20
Cys Leu Thr Leu Met Gly Asn Gly Ile Ile Leu Gly Leu Ile Cys Leu
                            40
Asp Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu Ala
                        55
Ile Val Asp Met Ser Tyr Ala Ser Ser Thr Ala Ala Pro Lys Met Leu
                    70
                                        75
Thr Asn Met Val Met His Gln Lys Ser Ile Ser Phe Ala Ser Cys Ile
                                                         95
                85
                                    90
Leu Gln Thr Phe Leu Tyr Leu Ala Phe Ala Val Thr Glu Cys Val Ile
            100
                                105
                                                    110
Leu Val Val Met Ser Cys Asp Arg Phe Val Val Ile Cys His Pro Leu
                            120
                                                 125
Lys Tyr Thr Leu Ile Met Ser Trp Arg Val Phe Val Ile Leu Ala Ala
    130
                        135
                                             140
Thr Cys Trp Val Phe Ser Phe Leu Leu Ala Ser Leu His Thr Lys Leu
                    150
                                        155
Ile Leu Arg Leu Pro Phe Cys Gly Pro Gln Asn Val Asn His Phe Phe
                165
                                    170
Phe Cys Gln Ile Met Ser Val Phe Arg Leu Ala Cys Ala Asp Thr Arg
            180
                                185
                                                     190
Leu Asn Val Ile Leu Phe Ala Gly Ser Val Met Val Leu Leu Gly Pro
                            200
                                                 205
Leu Cys Leu Leu Leu Val Ser Tyr Thr Ile Leu Val Val Ile Leu Gly
                        215
Ile His Ser Arg Glu Gly Arg Arg Asn Ser His Leu Cys Val Val Gly
                    230
                                        235
Leu Phe Phe Gly Cys Ala Ile Ser Met Tyr Met Val Pro Ser Lys His
                245
                                    250
                                                         255
Ser Gln Glu Gln Arg Lys Ile Leu Ser Leu Phe His Ser Leu Phe Asn
                                265
Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Thr Glu Val Lys
                            280
Ala Ala Leu Arg Ser Val Leu Trp Lys Gln Arg Ser Leu
    290
                        295
                                             300
<210> 2213
<211> 313
<212> PRT
<213> Mus musculus
<400> 2213
Met Val Pro Met Glu Arg Asn Val Ser Val Glu Ile Ile Phe Ser Leu
                                    10
Leu Gly Phe Thr Asp Tyr Pro Glu Leu Gln Ile Pro Leu Phe Leu Ile
                                25
Phe Leu Phe Met Tyr Val Ile Thr Val Val Gly Asn Leu Gly Met Ile
```

<210> 2212 <211> 301

```
40
Ala Leu Ile Asn Ile Asn Pro Lys Phe His Thr Pro Met Phe Phe Leu
                        55
Ser His Leu Ser Phe Val Asp Phe Cys Tyr Ser Thr Ile Ile Thr Pro
                    70
                                        75
Lys Leu Leu Glu Asn Leu Val Leu Ala Asp Lys Thr Ile Leu Tyr Phe
                                    90
Ser Cys Met Phe Gln Tyr Phe Leu Ser Cys Val Ala Val Val Ser Glu
            100
Ser Tyr Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Pro Arg Leu Cys Ile Leu
                                            140
Leu Val Thr Gly Ser Tyr Ile Trp Ser Ile Phe Ala Pro Leu Ile Leu
                    150
Leu Cys Tyr Ala Leu Gln Leu Lys Phe Ser Arg Phe Asn Val Ile Asn
                                    170
His Phe Phe Cys Glu Tyr Thr Ala Leu Ile Ala Val Ser Ser Asp
                                                     190
            180
                                185
Ile His Ile Pro Ser Leu Leu Phe Cys Phe Ala Thr Phe Asn Glu
        195
                            200
Val Ser Thr Leu Leu Ile Ile Leu Thr Ser Tyr Val Phe Ile Phe Val
                        215
Thr Val Leu Lys Ile Lys Ser Ala Ser Gly Arg Arg Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ala Ser His Leu Thr Ala Ile Thr Ile Phe His Gly Thr Ile
                                    250
Leu Ser Leu Tyr Cys Ile Pro Asn Ser Lys Asn Ser Arg Gln Val Val
                                265
Lys Val Ala Ser Val Phe Tyr Thr Val Val Asn Pro Met Leu Asn Pro
                            280
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Phe Gln Lys
                        295
                                            300
Leu Val Ser Thr Lys Ile Pro Leu Gln
305
                    310
<210> 2214
<211> 316
<212> PRT
<213> Mus musculus
<400> 2214
Met Asn His Glu Glu Leu Glu Ser Ile Asp Asn Val Ser Thr Val Ile
                                    10
Gln Phe Val Leu Ile Gly Phe Ser Asp Leu Pro Asn Leu Gln Gly Phe
                                25
Leu Phe Ala Val Phe Ser Val Val Tyr Ile Ile Ile Leu Ile Gly Asn
Phe Leu Ile Ile Ile Ile Ser Met Asp Gln Ala Leu Gln Lys Pro
                        55
Met Tyr Phe Phe Leu Ala Asn Phe Ser Ser Leu Glu Ile Cys Tyr Val
                    70
                                        75
                                                             80
Ser Val Thr Val Pro Arg Ile Leu Phe Asn Ile Gly Thr Gln Asn Arg
               8.5
                                    90
Ser Ile Ser Leu Met Ser Cys Ala Thr Gln Met Ser Phe Phe Leu Val
           100
                                105
                                                    110
Phe Gly Thr Thr Glu Ser Leu Leu Leu Ala Val Met Ser Tyr Asp Arg
```

120

125

```
Tvr Val Ala Ile Cys His Pro Leu Leu Tyr Pro Leu Ile Met Asn Pro
Thr Lys Cys Lys Gln Leu Ala Ala Val Ser Trp Leu Gly Gly Met Pro
                    150
                                        155
Val Gln Ile Gly Gln Thr Cys Gln Ile Phe Ser Met Asn Phe Cys Asn
Ser Tyr Lys Ile Asn His Phe Phe Cys Asp Ile Pro Pro Ile Leu Lys
                                185
Leu Ala Cys Gly Asp Thr Ser Val His Glu Leu Ser Val Tyr Val Val
       195
                            200
Leu Met Val Val Ala Ala Phe Pro Phe Ile Leu Val Leu Ala Ser Tyr
                        215
Ser Lys Ile Ile Ala Thr Ile Leu Arg Leu Pro Thr Ala Lys Gly Arg
                    230
                                        235
Ala Lys Ala Phe Ser Thr Cys Ser Ser His Leu Met Val Val Leu Leu
                245
                                    250
Phe Tyr Gly Ser Ala Thr Val Thr Tyr Leu Arg Pro Lys Ser Met His
                                265
Ser Pro Gly Thr Asp Lys Leu Leu Ser Leu Phe Tyr Thr Val Val Thr
                            280
Pro Met Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile
                        295
Ser Ala Leu Arg Lys Leu Leu Phe Lys Thr Tyr Tyr
                    310
```

<210> 2215

<211> 310

<212> PRT

<213> Mus musculus

<400> 2215

Met Glu Val Gly Asn Cys Ser Ala Thr Glu Phe Leu Phe Leu Gly Ile 10 Thr Asn Asn Pro Val Ile Lys Val Ile Leu Phe Thr Thr Phe Leu Ile 25 Val Tyr Leu Ile Ile Leu Ile Glu Asn Leu Gly Met Ile Ile Leu Ile 40 Arg Met Asn His Gln Leu His Ile Pro Met Tyr Phe Phe Leu Ser His 55 Leu Ser Phe Ser Asp Val Cys Tyr Ser Ser Ala Val Gly Pro Lys Met 70 75 Leu Leu Asp Leu Leu Ala Lys Ser Ser Asn Ser Ile Thr Phe Leu Gly Cys Val Leu Gln Phe Phe Ile Phe Cys Ile Phe Thr Asp Val Glu Cys 105 110 Met Leu Leu Ala Met Met Ala Phe Asp Arg Tyr Lys Ala Ile Ser Asn 120 125 Pro Leu Leu Tyr Ala Val Asp Met Ser Ser Lys Val Cys Tyr Gln Leu 135 140 Leu Ala Val Val Tyr Thr Val Ala Ile Val Asp Ala Val Val His Thr 150 155 Thr Leu Thr Phe Arg Leu Cys Phe Cys Gly Ser Lys Glu Ile Asn His 170 Phe Phe Cys Asp Leu Pro Pro Leu Tyr Met Leu Ser Cys Ser Asp Ile 180 185 Gln Val Asn Glu Leu Ala Leu Phe Thr Val Phe Gly Phe Ile Glu Leu 200 Ser Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Leu Ser

```
215
                                            220
   210
Val Leu Lys Ile Arg Ser Ala Glu Gly Arg Phe Lys Ala Phe Ser Thr
                                        235
                    230
Cys Thr Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Met Leu
                245
                                    250
Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys
           260
                                265
Met Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Val Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Gln Lys Leu
                        295
Lys Thr Lys Thr Trp Phe
<210> 2216
<211> 307
<212> PRT
<213> Mus musculus
<400> 2216
Met Lys Gln Glu Glu Leu Glu Ser Ile Asp Asn Val Ser Thr Val Ile
1
                 5
                                    10
Gln Phe Val Leu Leu Gly Phe Ser Tyr Leu Pro Ile Leu Gln Glu Phe
            20
                                25
Leu Phe Ala Val Phe Phe Val Val Tyr Ile Ile Ile Leu Ile Gly Asn
                            40
Phe Leu Ile Ile Leu Val Thr Ser Met Asp Ser Ala Leu Gln Lys Pro
                        55
Met Tyr Phe Phe Leu Ala Asn Phe Ser Ser Leu Glu Ile Cys Tyr Val
                                        75
                    70
Arg Ile Leu Phe Asp Ile Glu Lys Gln Asp Arg Arg Ile Ser Leu Met
                                    90
               8.5
Ser Cys Ala Thr Gln Leu Cys Phe Phe Leu Val Phe Gly Thr Thr Glu
           100
                                105
                                                    110
Cys Leu Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys
        115
                            120
Asn Pro Leu His Tyr Pro Leu Val Met Asn Pro Thr Lys Cys Thr Gln
                        135
Leu Ala Ala Gly Ser Trp Leu Gly Gly Ile Pro Val Gln Ile Gly Gln
                    150
                                        155
Thr Cys Gln Ile Phe Ser Met His Phe Cys Asn Ser Asn Gln Ile Glu
                                    170
                165
His Phe Phe Cys Asp Ile Pro Ile Ile Leu Lys Leu Ala Cys Gly Asn
                                                    190
            180
                                185
Thr Val His Glu Leu Ser Val Tyr Val Glu Gly Val Val Ala Ala Phe
                            200
        195
Pro Phe Ile Leu Val Leu Thr Ser Tyr Ser Lys Ile Ile Ala Met Ile
                        215
                                            220
Leu Arg Leu Pro Thr Ala Gln Gly Arg Ala Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Leu Leu Val Val Leu Leu Phe Tyr Gly Ser Ala Ala Val
                245
                                    250
Thr Tyr Leu Arg Pro Lys Ser Met His Ser Pro Val Thr Asp Lys Leu
                                                     270
            260
                                265
Ile Ser Leu Phe Tyr Thr Thr Met Thr Pro Met Phe Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Ile Ala Ala Leu Arg Lys Leu Ile
                        295
                                             300
```

```
Leu Lys Lys
305
<210> 2217
<211> 232
<212> PRT
<213> Mus musculus
<400> 2217
Met Asp Lys Glu Asn Cys Ser Ser Leu Pro Glu Phe Phe Leu Leu Gly
1
Ile Ser Ser Lys Tyr Gly Val Lys Val Val Leu Phe Val Val Phe Leu
            20
                                25
Leu Val Tyr Leu Thr Thr Leu Leu Glu Asn Ile Gly Met Ile Ala Leu
                            40
Ile Arg Met Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ser Phe Ser Asp Leu Cys Tyr Ser Thr Ala Val Gly Pro Arg
                    70
Met Leu Val Asp Leu Val Ala Glu Lys His Ser Ile Pro Phe Thr Gly
                                    90
Cys Phe Leu Gln Leu Leu Phe Val Tyr Val Phe Ile Asp Val Glu Cys
            100
                                105
Met Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Lys Ala Ile Ser Lys
                            120
                                                125
Pro Leu Leu Tyr Ser Val Asp Met Ser Ser Lys Val Cys Tyr Gln Phe
                        135
Leu Thr Leu Ile Tyr Leu Thr Ser Thr Ile Asp Gly Leu Ile His Thr
                    150
                                        155
Thr Leu Ala Phe Asn Leu Cys Phe Cys Gly Ser Thr Gln Ile Asn His
                                    170
                165
Phe Phe Cys Asp Leu Pro Pro Leu Tyr Leu Leu Ser Cys Ser Asp Thr
           180
                                185
                                                    190
Gln Ala Asn Glu Leu Val Val Phe Thr Leu Phe Gly Phe Ile Glu Leu
                            200
Ser Thr Ile Ser Ser Val Leu Val Ser Tyr Cys Tyr Ile Ile Ser Ser
                        215
Val Leu Lys Ile Ser Ser Ala Gly
<210> 2218
<211> 310
<212> PRT
<213> Mus musculus
<400> 2218
Val Lys Gln Glu Glu Leu Glu Ser Ile Tyr Asn Val Ser Thr Val Met
                                    10
Gln Phe Val Leu Leu Gly Phe Ser Asp Leu Pro Asn Leu Gln Gly Phe
                                25
Leu Tyr Ala Leu Phe Phe Val Val Phe Ile Ile Ile Leu Ile Asn Phe
                            40
Leu Ile Ile Leu Val Thr Cys Met Asp Pro Ala Leu Gln Lys Ser Ile
                        55
Tyr Leu Phe Leu Ala Tyr Phe Ser Ser Leu Glu Ile Cys Tyr Val Ser
                    70
Val Thr Leu Pro Lys Thr Leu Phe Cys Ile Glu Met Gln Tyr Arg Thr
```

```
90
Ile Ser Leu Met Pro Cys Ala Ile Gln Leu Cys Phe Phe Leu Ile Phe
                                105
                                                    110
Gly Ser Thr Glu Cys Phe Leu Leu Thr Gly Met Tyr Tyr Asp Arg Tyr
                            120
                                                125
Met Ser Ile Cys Asn Pro Leu His Tyr Pro Leu Val Met Asn Pro Lys
                        135
Asn Cys Lys Glu Leu Ala Ala Val Ser Trp Phe Gly Gly Ile Pro Val
                    150
                                        155
Gln Ile Val Gln Thr Tyr Gln Val Phe Ser Met Arg Phe Cys Asn Ser
                                    170
Asn Gln Ile Tyr His Phe Phe Cys Asp Ile Pro Pro Ile Leu Lys Leu
            180
                                185
                                                    190
Ala Cys Gly Asp Thr Ser Val His Glu Leu Pro Val Phe Val Val Val
       195
                            200
Ser Val Val Ala Leu Pro Phe Ile Leu Leu Thr Ser Ser Ser
                        215
Lys Ile Ile Ala Thr Ile Leu Arg Leu Pro Thr Ala Lys Gly Arg Ala
                    230
Arg Ala Phe Ser Thr Cys Tyr Ser His Leu Leu Val Val Leu Leu Phe
                                    250
Tyr Gly Ser Ala Thr Val Thr Met Arg Pro Thr Ser Leu Cys Ser Ser
                                265
                                                    270
Arg Thr Asp Lys Leu Phe Ser Leu Phe Tyr Ala Val Ile Pro Met
Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Ala Ala
                        295
                                            300
Leu Arg Lys Leu Ile Leu
<210> 2219
<211> 232
<212> PRT
<213> Mus musculus
<400> 2219
Leu Glu Ser Ile Asp Asn Val Ser Thr Val Met Gln Leu Val Leu Leu
                                    10
Gly Phe Ser Asp Met Ala Asn Leu Gln Gly Phe Leu Tyr Ala Ala Phe
Ile Val Val Tyr Ile Ile Val Leu Val Gly Asn Phe His Ile Ile Leu
Val Thr Ser Met Asp Thr Ala Phe Gln Lys Ser Met Tyr Phe Phe Leu
                        55
Ala Ile Phe Ser Ser Leu Glu Ile Cys Tyr Val Ser Ala Thr Asp Cys
                                                            80
                    70
                                        75
Ile Ser Ile Val Gln Ile Val Gln Thr Tyr Gln Ile Phe Ser Met His
                                    90
Phe Cys Asn Ser Asn Gln Ile Tyr His Phe Phe Arg Asp Ile Pro Pro
            100
                                105
                                                    110
Ile Leu Lys Leu Pro Cys Glu Asp Thr Ser Val His Glu Leu Pro Val
        115
                            120
Phe Val Val Val Ser Val Ala Phe Ala Leu Pro Phe Ile Leu Val Val
                        135
                                            140
Thr Ser Ser Ser Lys Ile Ile Ala Thr Ile Leu Arg Leu Pro Thr Ala
                    150
                                        155
Lys Gly Arg Ala Arg Ala Phe Ser Thr Cys Tyr Ser His Leu Leu Met
```

170

```
Val Leu Leu Trp Ile Cys Tyr Ser Tyr Arg Pro Thr Ser Leu Cys
                                185
Ser Ser Arg Thr Asp Lys Leu Phe Ser Leu Phe Tyr Ala Val Val Ile
                            200
                                                205
Pro Met Leu Asn Pro Leu Val Tyr Ser Leu Arg Asn Lys Glu Val Thr
Ala Ala Leu Arg Lys Leu Ile Leu
                    230
<210> 2220
<211> 246
<212> PRT
<213> Mus musculus
<400> 2220
Leu Cys Tyr Thr Ala Val Val Pro His Ile Leu Ala Asn Asn Phe
Gln Ser Glu Lys Thr Ile Ser Leu Leu Ser Cys Ala Thr Gln Met Val
            20
Phe Leu Ile Gly Leu Gly Ser Ala Asp Cys Phe Leu Leu Ala Ile Met
                            40
Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu Gln Tyr Pro Leu
                        55
Ile Met Thr Ile Thr Leu Cys Val Arg Leu Val Val Ala Ser Val Val
                    70
                                        75
Ile Gly Leu Phe Leu Ser Leu Gln Leu Val Val Phe Ile Phe Cys Leu
                85
                                    90
                                                        95
Pro Phe Cys Gln Asp Arg Gly Ile Glu His Phe Phe Cys Asp Ala Pro
                                105
                                                    110
Pro Leu Met Arg Leu Val Cys Ala Thr Ser His Ile His Glu Leu Ser
                            120
                                                125
Val Leu Met Ala Ala Thr Leu Ala Ile Ala Val Pro Phe Phe Ile
                        135
                                            140
Ala Thr Thr Tyr Ala Leu Ile Val Ala Ala Val Leu Lys Leu His Ser
                    150
                                        155
Ala Ala Gly Arg His Arg Ala Phe Asn Thr Cys Ser Ser His Leu Thr
                165
                                    170
                                                        175
Val Val Leu Leu Gln Tyr Gly Cys Cys Ala Phe Met Tyr Leu Arg Pro
                                185
                                                    190
Val Ser Ser Tyr His Pro Lys Gln Asp Gln Phe Val Ser Leu Val Tyr
        195
                            200
                                                205
Thr Leu Gly Thr Pro Phe Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn
                        215
                                            220
Ser Glu Met Lys Gly Ala Ile Gly Lys Val Leu Thr Arg Lys Tyr Leu
                    230
                                        235
Ser Trp Lys Met Ile Gly
                245
<210> 2221
<211> 279
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (151)...(157)
```

<223> Any amino acid

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<400> 2221
Met Ala Lys Val Asn Leu Thr Leu Val Thr Glu Phe Leu Leu Ile Ala
                                    10
Phe Thr Glu His Pro Glu Trp Gly Leu Pro Leu Phe His Leu Phe Leu
Phe Ile Tyr Leu Phe Thr Leu Leu Gly Asn Ser Gly Met Ile Val Leu
                            40
                                                45
Ile Arg Met Asp Arg Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser
                        55
His Leu Ser Phe Met Asp Ile Cys Tyr Ser Ser Val Thr Val Pro Gln
                                        75
Thr Met Ala Val Leu Leu Glu His Gly Ala Ala Leu Ser Tyr Ala Arg
                85
                                    90
Cys Val Ala Gln Phe Phe Leu Phe Thr Phe Phe Gly Ser Ile Asp Cys
                                105
            100
                                                    110
Tyr Leu Leu Ala Leu Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Gln
                            120
        115
                                                125
Pro Leu Leu Tyr Val Thr Ile Met Thr Gln Lys Ala Leu Leu Ser Phe
                        135
                                            140
Val Val Gly Leu Thr Leu Xaa Xaa Xaa Xaa Xaa Xaa Gly Glu Ser
                    150
                                        155
Tyr Ile Gln Glu Leu Val Ile Ile Val Phe Ala Ile Phe Val Ile Pro
                                    170
                165
                                                        175
Cys Ser Met Val Val Ile Val Val Ser Tyr Leu Phe Ile Ile Val Ala
            180
                                185
                                                    190
Ile Leu Arg Ile Pro Ser Ala Gly Gly Arg Ala Lys Thr Phe Ser Thr
        195
                            200
                                                205
Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Phe Gly Thr Leu Ile
                        215
                                            220
Phe Met Tyr Leu Arg Asp Asn Ser Gly Gln Ala Ser Glu Lys Asp Arg
                    230
                                        235
Val Val Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu
                245
                                    250
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Leu Lys Asn Phe
           260
                                265
Leu Asn Arg Val Lys Thr Phe
<210> 2222
<211> 292
<212> PRT
<213> Mus musculus
<400> 2222
Leu Phe Val Leu Val Leu Ile Ser Tyr Leu Leu Thr Leu Val Gly Asn
Thr Ala Ile Ile Leu Val Ser Cys Leu Asp Ser Ala Leu Gln Thr Pro
                                25
Met Tyr Tyr Phe Leu Thr Asn Leu Ser Phe Val Asp Ile Cys Phe Ser
Thr Ser Ile Val Pro Gln Leu Leu Trp Asn Leu His Gly Pro Ala Lys
Thr Ile Thr Ala Thr Gly Cys Ala Ile Gln Leu Tyr Val Ser Leu Ala
```

Leu Gly Ser Thr Glu Cys Val Leu Leu Ala Val Met Ala Phe Asp Arg

Tyr Ala Ala Val Cys Arg Pro Leu His Tyr Ala Thr Val Met His Pro

```
100
                                105
Arg Leu Cys Gln Ser Leu Ala Gly Val Ala Trp Leu Ser Gly Val Gly
                            120
                                                 125
Asn Thr Leu Ile Gln Gly Thr Ile Thr Leu Arg Leu Pro Arg Cys Gly
                        135
                                             140
Asn His Lys Ile Tyr His Phe Ile Cys Glu Val Pro Ala Met Ile Lys
                    150
                                        155
Leu Ala Cys Val Asp Ile His Ala Asn Glu Val Gln Leu Phe Met Ala
                165
                                     170
Ser Leu Val Leu Leu Leu Pro Leu Thr Leu Ile Leu Val Ser Tyr
            180
                                185
                                                     190
Gly Tyr Ile Ala Gln Ala Leu Met Arg Leu Arg Ser Ala Leu Thr Trp
        195
                            200
Gly Lys Ala Leu Gly Thr Cys Gly Ser His Leu Ile Val Val Val Leu
                        215
                                             220
Phe Tyr Gly Thr Ser Thr Ala Val Tyr Ile His Pro Asn Ser Ser Tyr
                    230
                                        235
Ala Gln Ser Gln Gly Lys Phe Ile Thr Leu Leu Tyr Thr Val Val Ile
                245
                                     250
Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys
                                265
Gly Ala Leu Lys Arg Leu Val Arg Lys Asp Ser Ser Thr Gly Lys Lys
        275
                            280
Ile Leu Ser Arg
    290
<210> 2223
<211> 321
```

<212> PRT

<213> Mus musculus

<400> 2223

Met Ile Val Glu Asn Ile Thr Thr Met Ser Gly Phe Leu Leu Met Gly Phe Ser Asp Asn His Glu Leu Gln Ile Leu Gln Ala Leu Leu Phe Leu Val Thr Tyr Leu Val Gly Ser Ala Gly Asn Val Ile Ile Ile Thr Ile Thr Thr Leu Asp Pro Gln Leu Gln Ser Pro Met Tyr Tyr Phe Leu Lys His Leu Ser Ile Leu Asp Leu Ser Ser Leu Ser Val Thr Val Pro Gln Tyr Val Asp Ser Ser Leu Ala Gln Ser Gly Tyr Ile Ser Tyr Ala Gln Cys Met Leu Gln Ile Phe Phe Phe Thr Ala Phe Ala Trp Gly Glu Leu Ala Ile Leu Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Leu Pro Leu His Tyr Glu Val Ile Met Ser Pro Arg Lys Cys Thr Trp Ala Val Ala Thr Val Trp Leu Ser Gly Gly Ile Ser Gly Thr Leu Tyr Ile Thr Gly Thr Leu Phe Ile Arg Phe Cys Gly Asp Lys Ile Ile His Gln Phe Phe Cys Asp Val Pro Gln Leu Leu Lys Leu Ser Cys Ser Asn Asp His Leu Val Ile Met Asp Met Val Ser Phe Leu Thr Ala Val Ser Phe

```
Ala Cys Phe Thr Gly Ile Val Ile Ser Tyr Val His Ile Phe Ser Thr
                        215
Val Leu Arg Met Pro Ser Ala Glu Ser Arg Ser Lys Val Phe Ser Thr
                    230
                                        235
Cys Leu Pro His Leu Phe Val Val Ser Leu Phe Leu Ser Thr Gly Ala
                                    250
Phe Ala Tyr Leu Asn Leu Thr Ser Asp Ser Ser Thr Ala Leu Glu Phe
                                265
Leu Leu Ser Ile Phe Tyr Thr Val Leu Pro Pro Thr Leu Asn Pro Val
       275
                            280
Ile Tyr Ser Leu Arg Asn Glu Thr Ile Lys Asn Val Val Arg Lys Leu
                        295
Leu Leu Ser Thr Lys Phe Thr Val Arg Ile Ile Phe Phe Ser Cys Cys
                    310
                                        315
Phe
<210> 2224
```

```
<211> 290
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (92)...(124)
<223> Any amino acid
```

<400> 2224

Met Glu Gly Lys Asn Gln Thr Ala Pro Ser Glu Phe Ile Ile Leu Gly 10 Phe Asp His Leu Asn Glu Leu Gln Tyr Leu Leu Phe Thr Ile Phe Phe 25 Leu Thr Tyr Ile Cys Thr Leu Gly Gly Asn Val Phe Ile Ile Val Val 35 40 Thr Ile Ala Asp Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Gly 55 Asn Leu Ala Leu Ile Asp Ile Cys Tyr Thr Thr Thr Asn Val Pro Gln 70 75 Met Met Val His Leu Leu Ser Glu Lys Lys Ile Xaa Xaa Xaa Xaa Xaa 90 85 100 105 120 Ser Val Leu His Thr Val Leu Thr Phe His Leu Pro Phe Cys Gly Asn 135 140 Asn Gln Ile Asn Tyr Phe Phe Cys Asp Ile Pro Pro Leu Leu Ile Leu 150 155 Ser Cys Gly Asp Thr Ser Leu Asn Glu Leu Ala Leu Leu Ser Ile Gly 170 Ile Leu Ile Gly Trp Thr Pro Phe Leu Cys Ile Ile Leu Ser Tyr Leu 180 185 190 Tyr Ile Ile Ser Thr Ile Leu Arg Ile Arg Ser Ser Glu Gly Arg Gln 195 200 205 Lys Ala Phe Ser Thr Cys Ala Ser His Leu Leu Ile Val Ile Leu Tyr 215 220 Tyr Gly Ser Ala Ile Phe Thr Tyr Val Arg Pro Ile Ser Ser Tyr Ser 235 230 240

<210> 2225 <211> 320 <212> PRT <213> Mus musculus

<400> 2225 Met Ser Ile Asn Cys Ser Leu Trp Gln Glu Asn Ser Leu Ser Val Lys Arg Phe Ala Phe Ala Lys Phe Ser Glu Val Pro Gly Glu Cys Phe Leu 25 Leu Phe Thr Leu Ile Leu Leu Met Phe Leu Val Ser Leu Thr Gly Asn Ala Leu Ile Ala Leu Val Ile Cys Thr Asn Pro Ser Leu His Asn Pro 55 Met Tyr Phe Phe Leu Ala Asn Leu Ser Leu Leu Glu Ile Gly Tyr Thr 70 Cys Ser Val Ile Pro Lys Met Leu Gln Ser Leu Val Ser Glu Ala Arg Glu Ile Ser Arg Glu Gly Cys Ala Thr Gln Met Phe Phe Thr Phe 105 Phe Gly Ile Thr Glu Cys Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg 120 125 Cys Met Ala Ile Cys Ser Pro Leu His Tyr Pro Thr Arg Met Ser Ser 135 140 Gly Val Cys Ala His Leu Ala Ile Val Ser Trp Gly Met Gly Cys Ile 155 Val Gly Leu Gly Gln Thr Asn Phe Ile Phe Ser Leu Glu Phe Cys Gly 170 175 Pro Cys Glu Ile Asp His Phe Phe Cys Asp Leu Pro Pro Val Leu Ala 185 Leu Ala Cys Gly Asp Thr Ser Gln Asn Glu Ala Ala Ile Phe Val Ala 195 Ala Val Leu Cys Ile Ser Ser Pro Phe Leu Leu Ile Ile Tyr Ser Tyr 220 Val Arg Ile Leu Val Ala Val Leu Val Met Pro Ser Pro Glu Gly Arg 230 235 His Lys Ala Leu Ser Thr Cys Ser Ser His Leu Leu Val Val Thr Met 250 Phe Tyr Gly Ser Ala Ser Ile Thr Tyr Leu Arg Pro Lys Ser Ser His 265 Ser Pro Gly Met Asp Lys Leu Leu Ala Leu Phe Tyr Thr Ala Val Thr 275 280 Ser Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Gly Ser Lys 295 300 Gly Ser Thr Glu Lys Asn Thr Glu Ser Glu Glu Thr Ser Gly Asn Lys 310 315

```
<211> 206
<212> PRT
<213> Mus musculus
<400> 2226
Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Leu Pro Leu His Tyr Glu
                                    10
Val Ile Met Ser Pro Arg Lys Cys Thr Trp Ala Val Ala Ala Val Trp
Leu Ser Gly Gly Ile Ser Gly Thr Leu Phe Thr Ala Ser Thr Leu Ser
Ile Arg Phe Cys Gly Asp Lys Ile Ile His Gln Phe Phe Cys Asp Ile
Pro Gln Leu Leu Lys Leu Ser Cys Ser Asn Asp Asp Phe Gly Val Leu
                                         75
Glu Val Ser Ile Phe Met Ala Val Met Ala Phe Ala Cys Phe Met Gly
Ile Ala Phe Ser Tyr Gly Gln Ile Phe Ser Thr Val Leu Arg Met Pro
                                105
Ser Ala Glu Gly Arg Ser Lys Val Phe Ser Thr Cys Leu Pro His Leu
                            120
Phe Val Val Ser Phe Phe Leu Ser Thr Gly Ser Cys Ala Tyr Leu Lys
                                            140
                        135
Pro Thr Ser Asp Ser Pro Thr Ala Ser Asp Leu Met Leu Ser Ile Phe
                    150
                                        155
Tyr Thr Val Leu Pro Pro Thr Leu Asn Pro Phe Ile Tyr Ser Leu Arg
                165
                                    170
Asn Lys Ser Leu Lys Glu Ala Val Lys Lys Leu Leu Ser Glu Glu
                                185
                                                    190
Leu Val Gly Lys Ile Tyr Val Cys Ser Val Phe Ser Ala Cys
                            200
<210> 2227
<211> 311
<212> PRT
<213> Mus musculus
<400> 2227
Met Arg Ser Asp Asn Asp Ser Thr Val Ser Glu Leu Ile Leu Leu Gly
                                    10
Leu Pro Ile Gln Ala Glu Asp Gln Gly Met Tyr Cys Ala Leu Phe Leu
Thr Met Cys Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu Leu
        35
Ile Arg Leu Asn Phe His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro Lys
                    70
                                         75
Met Leu Val Asn Met Leu Thr His Ser Gln Phe Ile Ser Tyr Val Gly
                                    90
Cys Ile Phe Gln Leu Tyr Phe Leu Ser Thr Phe Thr Asp Leu Asp Ser
Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
```

Pro Leu His Tyr Thr Ile Ile Met Ser Gln Asn Leu Cys Ile Leu Leu

Val Val Val Ser Thr Leu Ser Ser Ala Asn Ser Leu Val Tyr Thr Leu

135

150

140

```
Leu Leu Ala Arg Phe Ser His Phe Arg Asn Asn Thr Thr Pro His Tyr
                                    170
Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ser Ile Ser Asp Thr Thr
                                185
                                                    190
Ile Asn Glu Leu Val Ile Phe Pro Leu Gly Thr Val Val Ile Ala Leu
Ala Phe Ile Cys Ile Leu Val Ser Tyr Gly Arg Ile Gly Ile Thr Ile
                                            220
Leu Lys Thr Pro Ser Ile Arg Gly Ile Cys Lys Ala Leu Ser Thr Cys
                    230
                                        235
Gly Ser His Leu Thr Val Val Ser Leu Tyr Tyr Gly Ala Ile Thr Gly
                                    250
                245
Leu Tyr Leu Val Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp Val Ile
                                                    270
            260
                                265
Val Ala Val Ile Tyr Ser Leu Val Thr Pro Met Leu Asn Pro Phe Ile
                            280
Tyr Ser Leu Arg Asn Gln Asp Met Lys Lys Ser Ile Glu Lys Tyr Ser
                        295
                                            300
Glu Gln Glu Thr Val Phe Thr
```

<210> 2228 <211> 177

<212> PRT <213> Mus musculus

<400> 2228

Met Arg Arg Asp Asn Glu Ser Thr Val Ser Glu Phe Ile Leu Leu Gly Leu Pro Ile Arg Ala Glu Asp Gln Asp Met Tyr Ser Ala Pro Phe Leu 20 25 Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu 40 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Ala Thr Ala Pro Lys 70 75 Met Leu Arg Asn Met Leu Ile His Ser His Phe Ile Ser Tyr Ala Gly 90 Tyr Val Ser Gln Val Tyr Phe Phe Thr Phe Leu Arg Ser Ile Asp Ser 100 105 Phe Leu Leu Met Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 Pro Leu His Tyr Thr Ile Ile Met Ser Gln Ser Leu Cys Val Leu Leu 135 140 Val Ala Met Ser Trp Thr Leu Ser Phe Phe Asn Ile Phe Phe Ile Arg 150 Tyr Phe Ser His Leu His Phe Pro Met Leu Cys Gln Asn Ser His Ile 170 Pro

<210> 2229

<211> 314

<212> PRT

<213> Mus musculus

```
<400> 2229
Leu Arg Ala Thr Lys Asn Lys Thr Glu Val Thr Glu Phe Val Leu Leu
Gly Leu Ser Ser Arg Pro Glu Met Gln Pro Val Ile Phe Gly Val Ile
                                25
Tyr Leu Thr Ala Val Leu Gly Asn Thr Leu Leu Val Leu Val Cys
Ser Asp Pro Lys Leu Gln Thr Pro Met Tyr Phe Leu Leu Ser Gln Leu
Ser Leu Ile Ala Ile Cys Leu Thr Thr Ile Thr Val Pro Gln Met Leu
                    70
Val His Thr Leu Ser Ala Val Arg Asn Ile Ser Tyr Asn Cys Cys Met
                                    90
Thr Gln Leu Phe Phe Phe Met Ala Val Gly Ser Met Glu Gly His Leu
Leu Ala Asp Ile Ala Asp Tyr Tyr Val Ala Ile Cys Asp Pro Leu Arg
                            120
Tyr Tyr Ala Ile Val Ser His Ser Leu Cys Leu Gln Ile Thr Leu Thr
                        135
                                            140
Ser Trp Val Met Val Ser Leu Asn Ser Leu Leu Tyr Ser Val Leu Val
                                        155
Thr Arg Leu Thr Phe Cys Gly Asn Lys Val Thr His Phe Phe Cys Asp
                                    170
Ile Thr Pro Leu Leu Lys Leu Ser Cys Thr Arg Pro Val Leu Asn Glu
                                185
                                                    190
Met Leu Ile Phe Thr Glu Gly Ala Ala Val Val Gly Ser Pro Phe Phe
Leu Ile Trp Gly Ser Tyr Ala Arg Ile Gly Ile Ala Met Ala His Met
                        215
His Ser Phe Ala Ala Leu Lys Lys Ala Leu Ser Thr Cys Ser Ser His
                    230
                                        235
Ile Leu Ile Val Leu Leu Phe Gly Ser Leu Ala Arg Met Tyr Leu
                                    250
Lys Pro Ser Ser Ser Tyr Asp Leu Asp Gln Asp His Gln Val Ala Ile
                                265
Phe Tyr Met Leu Ile Ser Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu
                            280
Arg Asn Gln Asp Val Lys Gly Ala Leu Trp Arg Leu Phe Arg Lys Leu
                        295
His Thr Ser Asp Trp Leu Leu Glu Lys Gln
<210> 2230
<211> 170
<212> PRT
<213> Mus musculus
<400> 2230
Leu Thr Ile Met Ala Gln Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
Leu Lys Thr Phe Gln Leu Ser Phe Cys His Ser Asn Val Val Pro Gln
Phe Phe Cys Asp Ile Pro Ser Leu Leu Arg Leu Ser Cys Ser Asp Thr
        35
                            40
Phe Asn Asn Lys Leu Leu Ile Leu Leu Ser Ala Ile Leu Val Ser Gly
                        55
```

Ser Cys Phe Val Phe Ile Val Ile Ser Tyr Val Arg Ile Leu Ser Thr

```
Val Leu Lys Val Pro Val Lys Gly Glu Arg Gly Lys Ala Phe Ser Thr
Cys Val Pro His Ile Ile Val Val Ser Val Phe Leu Ser Ser Ala Ala
                                105
Tyr Ile Tyr Leu Lys Pro Pro Val Val Thr Leu Glu Val Ala Lys Glu
                            120
Met Thr Leu Ser Val Phe Tyr Thr Ile Val Pro Pro Phe Leu Asn Pro
                        135
Ile Ile Tyr Ser Leu Arg Asn Arg Gln Ile Lys Lys Ala Val Ser Lys
                   150
                                     155
Leu Ile Ser Arg Ile Phe Phe Leu Ile Met
                165
```

<210> 2231 <211> 317 <212> PRT <213> Mus musculus

<400> 2231

Met Pro Asn Asp Thr Arg Val Thr Gly Phe Ile Leu Met Gly Phe Ser Ala Ala Pro Glu Leu Gln Thr Val Cys Gly Leu Phe Phe Leu Val Met 25 Tyr Leu Ala Val Ile Met Ser Asn Leu Leu Ile Ile Thr Val Ile Thr Leu Asp Leu Lys Leu Gln Thr Pro Met Tyr Phe Phe Leu Lys Asn Leu Ser Leu Leu Asp Val Phe Leu Val Ser Ile Pro Ile Pro Lys Phe Ile 75 Ile Asn Asn Leu Thr His Asn Asn Tyr Ile Ser Ile Leu Gly Cys Ala 90 Phe Gln Ile Leu Leu Met Thr Ser Phe Ser Ala Gly Glu Ile Phe Val 100 105 Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Ser Pro Leu 115 120 125 Cys Tyr Glu Ala Ile Met Ser Ser Gly Asn Cys Val Leu Met Val Gly 135 140 Val Ser Trp Ala Thr Gly Ile Leu Phe Gly Ala Leu Tyr Thr Ala Gly 150 155 Thr Phe Ser Met Pro Phe Cys Gly Ser Met Val Ile Pro Gln Phe Phe 165 170 Cys Asp Val Pro Ser Leu Leu Arg Ile Ser Cys Ser Gly Ser Leu Met 180 185 190 Ile Ile Tyr Ile Ser Leu Gly Ile Gly Met Cys Leu Cys Met Ser Cys 195 200 205 Phe Tyr Cys Val Met Ile Ser Tyr Phe Tyr Ile Ile Ser Thr Val Leu 215 220 Lys Ile Pro Thr Thr Arg Gly Gln Ser Lys Ala Phe Ala Thr Cys Ile 230 235 Pro His Leu Thr Val Phe Ser Val Phe Ile Ala Thr Ala Cys Phe Val 250 Tyr Leu Lys Pro Pro Ser Asp Ile Pro Ser Ile Thr Asp Arg Leu Phe Ser Val Leu Tyr Thr Val Leu Pro Pro Ala Leu Asn Pro Val Ile Tyr 280 Ser Leu Arg Asn Ser Asp Val Lys Cys Ser Leu Arg Arg Leu Gln Gln Asn Leu Cys Pro Arg Asp Ser Tyr Tyr Leu Thr Val Gln

305 310 315

```
<210> 2232
<211> 313
<212> PRT
<213> Mus musculus
<400> 2232
Met His Phe Gln Thr Met Ala Asn Thr Ser Ile Val Thr Glu Phe Phe
Leu Glu Gly Phe Cys Thr Trp Glu Leu Arg Val Leu Leu Ser Val Leu
                               25
Phe Leu Leu Val Tyr Leu Cys Ser Leu Leu Gly Asn Ile Thr Ile Ile
                           40
Ile Val Thr Thr Val Asp Gln Thr Leu Lys Thr Pro Met Tyr Phe Phe
                       55
Leu Arg Asn Leu Ser Ile Leu Asp Met Cys Tyr Ile Ser Ile Thr Val
                                       75
Pro Ser Ala Cys Ile Asn Ser Leu Thr Asp His Arg Asn Ile Ser Val
                                   90
Ala Gly Cys Ala Ala Gln Ile Phe Ser Phe Leu Phe Cys Ala Leu Val
           100
                              105
                                                   110
Glu Ile Phe Phe Phe Phe Met Ala Gln Asp Arg Tyr Val Ala Ile Cys
       115
                           120
                                               125
Lys Pro Leu Leu Tyr Pro Val Ile Met Asn His Gln Phe Cys Val Gln
                       135
                                           140
Met Thr Leu Ala Ser Leu Leu Ser Ser Leu Val Ile Ala Ser Val His
                  150
                                      155
Thr Phe Lys Thr Phe Gln Leu Ser Phe Cys His Ser Asn Val Ile Pro
                                  170
             165
Gln Phe Phe Cys Asp Leu Pro Ala Leu Leu Arg Leu Ser Cys Ser Asp
                              185
           180
                                                  190
Thr Phe Asn Asn Asn Leu Leu Ile Leu Pro Thr Asp Ile Gly Val Ser
 195
                           200
Gly Ser Cys Phe Val Phe Ile Ala Ile Ser Tyr Ile Arg Ile Leu Ser
                       215
Thr Val Leu Lys Ile Pro Ile Lys Arg Glu Arg Gly Lys Ala Phe Ser
                   230
                                       235
Thr Cys Val Pro His Ile Ile Val Val Ser Val Phe Val Ser Ser Ala
               245
                                   250
                                                       255
Ala Tyr Val Tyr Leu Arg Pro Pro Val Ile Thr Phe Glu Val Val Gln
           260
                               265
Glu Met Ile Val Ser Val Phe Tyr Thr Met Val Pro Pro Phe Leu Asn
                           280
                                              285
Pro Ile Ile Tyr Ser Leu Arg Asn Lys Gln Ile Lys Glu Ala Val Arg
                       295
                                           300
Lys Val Met Ser Gln Val Phe Pro Ile
                   310
<210> 2233
<211> 325
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (19)...(25)
```

```
<400> 2233
Met Thr Asn His Thr Met Val Thr Glu Phe Ile Leu Thr Gly His Pro
 1
                                    10
Asn Arg Xaa Xaa Xaa Xaa Xaa Xaa Leu Leu Gly Ile Pro Glu Thr
                                25
Glu Gly Leu Glu Asn Val Leu Leu Phe Leu Phe Ser Thr Leu Tyr Ala
                            40
Cys Ala Leu Leu Gly Asn Leu Leu Leu Thr Ala Val Ile Ser Ser
                        55
Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Ile
                    70
                                        75
Phe Asp Met Gly Phe Cys Ser Thr Thr Ala Pro Lys Met Leu Ser Tyr
                                    90
Leu Ser Gly Gln Gly Gly Ile Ser Phe Gln Gly Cys Val Val Gln
            100
                                105
                                                    110
His Phe Phe Tyr His Cys Leu Gly Cys Thr Glu Cys Phe Leu Tyr Thr
                            120
                                                125
Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Phe Pro Leu Arg Tyr
                        135
                                            140
Thr Ile Ile Met Asn His Arg Val Cys Cys Val Leu Ala Thr Gly Thr
                    150
                                        155
Trp Met Ser Gly Cys Val His Ala Thr Ile Leu Thr Cys Leu Thr Phe
                165
                                    170
Gln Leu Pro Tyr Cys Gly Pro Ser Asn Val Gly Tyr Tyr Phe Cys Asp
            180
                                185
Met Pro Ala Val Leu Pro Leu Ala Cys Glu Asp His Ser Leu Ala Gln
                            200
                                                205
Arg Val Gly Phe Thr Asn Val Gly Leu Leu Ser Leu Ile Cys Phe Phe
                        215
                                            220
Leu Ile Leu Val Ser Tyr Thr Arg Ile Gly Ile Ser Ile Ser Lys Ile
                    230
                                        235
Arg Ser Thr Glu Gly Arg Gln Arg Ala Phe Ser Thr Cys Ser Ala His
                245
                                    250
Leu Thr Ala Ile Ile Cys Ala Tyr Gly Pro Val Ile Val Ile Tyr Leu
            260
                                265
Gln Pro Asn Pro Ser Pro Leu Leu Gly Ala Val Ile Gln Ile Leu Asn
                            280
Asn Leu Val Thr Pro Thr Ile Asn Pro Leu Ile Tyr Ser Leu Arg Asn
                        295
                                            300
Lys Asp Val Lys Ala Ala Leu Arg His Val Phe Leu Lys Arg Ser Leu
                    310
Ser Leu Glu Ser Lys
<210> 2234
<211> 254
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (91)...(145)
<223> Any amino acid
<400> 2234
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Met Ile Ala Gly Asn Tyr Ser Met Val Thr Glu Phe Ile Leu Ala Gly

```
Leu Thr Ser Thr Pro Glu Leu Gln Leu Pro Leu Phe Phe Leu Phe Leu
Gly Ile Tyr Ala Val Thr Met Val Gly Asn Leu Gly Met Ile Thr Leu
                         40
Ile Leu Leu Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Ser Leu Ser Phe Ile Asp Leu Cys His Ser Thr Val Ile Thr Pro Lys
                  70
                                   75
                                                     80
Met Leu Val Asn Phe Val Thr Val Lys Asn Xaa Xaa Xaa Xaa Xaa
                                90
100
                             105
120
                                           125
Xaa Phe Ser Ala Phe Asn Ile Leu Phe Pro Thr Leu Ser Ile Leu Ser
                  150
                                    155
Ser Tyr Ile Phe Ile Ile Ala Ser Ile Leu Arg Ile Lys Ser Thr Glu
                                170
Gly Arg Ser Lys Ala Phe Ser Thr Cys Ser Ser His Ile Ser Ala Val
                             185
          180
Ala Val Phe Phe Gly Ser Ala Ala Phe Met Tyr Leu Gln Pro Ser Ser
                         200
Val Ser Ser Met Asp Gln Gly Lys Val Ser Ser Val Phe Tyr Thr Ile
                     215
Val Val Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp
                                    235
Val Lys Val Ala Leu Thr Lys Phe Tyr Glu Lys Ser Phe Ser
<210> 2235
<211> 265
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (77)...(80)
<223> Any amino acid
<221> VARIANT
<222> (81)...(82)
<223> Any amino acid
<400> 2235
Met Gly Glu Asp Asn Arg Thr Ser Val Thr Glu Phe Ile Phe Leu Gly
                                10
Leu Ser Gln Asp Pro Gln Thr Gln Val Leu Leu Phe Phe Leu Phe Leu
          20
Phe Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu Leu Ile Ile Val Leu
                         40
Ile His Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Arg
                     55
                                      60
Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Thr Thr Xaa Xaa Xaa Xaa
                                   75
Phe Xaa Xaa Cys Leu Gln Pro Leu His Tyr Ser Thr Ile Met Tyr Thr
```

```
85
Arg Val Cys Val Gln Leu Ala Ala Gly Ser Trp Ala Ser Gly Ala Leu
           100
                               105
                                                    110
Val Ser Leu Val Asp Thr Thr Phe Thr Leu Arg Leu Pro Tyr Arg Gly
       115
                            120
                                               125
Asn Asn Val Ile Asn His Phe Phe Cys Glu Pro Pro Ala Leu Leu Lys
                                           140
                        135
Leu Ala Ser Ala Asp Thr Tyr Ser Thr Glu Met Ala Ile Phe Ala Met
                   150
                                       155
Gly Val Val Ile Leu Leu Ala Pro Val Ser Leu Ile Leu Thr Ser Tyr
                                   170
                                                        175
               165
Trp Asn Ile Val Ser Thr Val Ile Gln Met Gln Ser Gly Glu Gly Arg
                                                    190
                                185
           180
Leu Lys Val Phe Ser Thr Cys Gly Ser His Leu Ile Val Val Leu
                            200
                                                205
195
Phe Tyr Gly Ser Gly Ile Phe Ala Tyr Met Arg Pro Asn Ser Lys Ile
                                            220
                        215
Met Asn Glu Lys Asp Lys Met Ile Ser Val Phe Tyr Ser Ala Val Thr
                   230
                                        235
Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
                                   250
               245
Gly Ala Leu Lys Arg Ile Thr Thr Lys
            260
```

<210> 2236

<211> 268

<212> PRT

<213> Mus musculus

<400> 2236

Leu Val Val Leu Val Ile Glu Asp Ser Arg Leu His Asn Pro Met Tyr Tyr Phe Leu Thr Val Leu Ser Ser Leu Asp Ala Cys Phe Ser Ser Val Leu Thr Pro Lys Met Leu Ala Asn Phe Leu Ser Lys Asn Lys Ser Ile Ser Phe Ala Gly Cys Ala Thr Gln Met Leu Leu Phe Val Thr Phe Gly Thr Thr Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Tyr Ser Pro Leu Leu Tyr Ala Val Arg Met Ser Pro Arg Val 8.5 Tyr Val Pro Leu Ile Ile Ala Ser Tyr Thr Gly Gly Ile Leu His Ala Thr Ile His Thr Val Ala Thr Phe Ser Leu Ser Phe Cys Gly Ser Asn Glu Ile Arg His Val Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr His Leu Asn Gln Leu Leu Phe Tyr Cys Ala Gly Ser Ile Lys Leu Ile Thr Ile Leu Ile Val Leu Val Ser Tyr Gly Phe Val Leu Leu Ala Ile Leu Lys Ile Asn Ser Ala Glu Gly Arg Arg Lys Ile Phe Ser Thr Cys Gly Ala His Leu Thr Gly Val Ser Ile Phe His Gly Thr Ile Leu Phe Met Tyr Val Arg Pro Ser Ser Asn Tyr Thr Leu

Glu Gln Asp Met Val Val Ser Thr Phe Tyr Thr Ile Val Ile Pro Met 225 230 235 240

Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala 245 250 250

Met Arg Lys Leu Leu Lys Arg Lys Leu Val His Glu 265

<210> 2237 <211> 321 <212> PRT <213> Mus musculus <400> 2237

<400> 2237 Met Ala Asp Arg Asn Leu Thr Val Ile Thr Glu Phe Ile Leu Leu Gly Leu Thr Glu Asp Pro Val Leu Asn Thr Val Leu Ser Val Leu Cys Leu 20 Leu Ile Tyr Val Ile Thr Val Ala Gly Asn Leu Trp Ile Ile Val Ile 40 Ile Leu Ala Thr Asp Gln Leu His Ser Pro Lys Tyr Phe Phe Leu Thr 60 His Leu Ala Phe Leu Asp Phe Cys Tyr Ser Ser Val Phe Leu Pro Lys 70 75 80 Met Leu Ile Asn Tyr Leu Val Gly Gln Asn Ser Ile Ser Tyr His Gly 85 Cys Leu Leu Gln Tyr Ser Phe Val Asn Met Phe Leu Thr Ala Glu Cys 105 100 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Ser 120 Pro Leu Tyr Tyr Arg Cys Leu Met Thr Pro Thr Phe Cys Ile Tyr Leu 135 140 Val Ser Ala Ser Tyr Leu Leu Gly Cys Ala Asn Ser Leu Thr His Leu 150 155 Arg Ser Leu Leu Asn Leu Thr Phe Cys Gly Pro Asn Val Ile Asp His 170 165 Tyr Phe Cys Asp Ile Pro Leu Leu Phe Gln Leu Ser Cys Ser Asp Thr 180 185 190 His Asp Ser Glu Val Leu Phe Ile Val Leu Ser Gly Ala Thr Ser Ile 195 200 Thr Thr Phe Leu Ile Val Ile Ser Ser Tyr Leu Gly Ile Leu Ile Thr 215 220 Val Leu Lys Ile His Ser Ala Arg Gly Ser Tyr Lys Ala Phe Ile His 235 230 Leu Xaa Xaa Xaa Xaa Xaa Xaa Cys Ala Ser His Leu Thr Val Val 250 Thr Leu Phe Tyr Gly Thr Val Asn Ile Asn Tyr Thr Trp Glu Pro Gly Ser Ser Phe Pro Gln Asp Thr Glu Lys Ile Leu Ser Val Phe Tyr Thr 285 280 Leu Leu Pro Val Leu Asn Leu Phe Ile Tyr Ser Val Arg Asn Lys 300 Glu Ala Lys Glu Ala Met Arg Arg Met Ile Lys Arg Lys Ile Phe Ala 310 315 305 Arq

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<212> PRT
<213> Mus musculus
<400> 2238
Met Asp Thr Trp Asn Tyr Ile Lys Glu Phe Asp Phe Ile Leu Met Gly
Leu Thr Asp Ser Lys Glu Ile Gln Leu Val Leu Ala Ile Val Phe Leu
                                25
Met Ile Tyr Leu Val Thr Val Leu Gly Asn Thr Gly Met Met Leu Ile
                            40
Ile Cys Leu Asp Ala His Leu His Thr Pro Met His Phe Phe Leu Thr
                        55
His Leu Ser Phe Leu Asp Leu Ile Tyr Ser Thr Val Ile Thr Pro Lys
                    70
                                        75
Thr Phe Glu Asn Leu Phe Thr Ser Ile Lys Asn Asn Ser Phe Met Gly
                                    90
Cys Ile Thr Gln Leu Tyr Tyr Phe Val Leu Phe Gly Gly Ala Gln Cys
            100
Phe Leu Leu Ser Ser Met Ala Tyr Asp Cys Tyr Val Ala Ile Asn Pro
                            120
        115
Leu Tyr Tyr Leu Ala Val Met Ser Arg Arg Gln Trp His Ala Phe Leu
   130
                        135
                                            140
Ile Gly Ser Tyr Leu Met Gly Ala Ile Asp Ser Ser Ile Asn Met Leu
                    150
                                        155
Cys Leu Asn Arg Met Asp Phe Cys Val Ser His Val Ile Asn His Phe
                165
                                    170
Phe Cys Asp Thr Pro Thr Ile Leu Ala Leu Ser Tyr Ser Asp Thr Tyr
            180
                                185
Val Ile Glu Ile Ile Ile Ile Val Phe Arg Ser Ser Leu Met Val
        195
                            200
Ser Leu Leu Thr Ile Ser Val Ser Tyr Ala Ser Ile Leu Ser Thr Ile
                        215
                                            220
Leu Lys Ile Asn Ser Ile Ser Gly Lys Gln Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ala Ser His Leu Leu Ala Val Thr Ile Ser Tyr Ser Thr Ala Ile Phe
                                    250
Thr Tyr Ser Lys Ser Lys Arg Leu Tyr Ser Leu Gly Lys Asp Gln Val
                                                     270
            260
                                265
Val Ser Ala Leu Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Glu Asn Ala Val Ser Arg Val Ile
Lys Lys Arg Glu Asp Ser Arg
<210> 2239
<211> 292
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (276)...(283)
<400> 2239
Met Leu Arg Lys Asn Tyr Thr Ala Val Thr Glu Phe Val Leu Leu Gly
                                    10
```

<211> 311

```
Leu Thr Asp Gln Ala Glu Leu Gln Pro Val Leu Phe Val Val Phe Leu
Leu Ile Tyr Leu Ile Thr Val Ile Gly Asn Val Ser Met Ile Phe Leu
                            40
Ile Arg Ser Asp Ser Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ser Phe Val Asp Leu Cys Tyr Ala Thr Asn Val Thr Pro Gln
                    70
                                         75
Met Leu Val Asn Phe Leu Ser Lys Arg Lys Thr Ile Ser Phe Ile Gly
                                     90
Cys Phe Ile Gln Phe His Phe Phe Ile Ala Leu Val Ile Thr Asp Tyr
                                 105
Tyr Met Leu Thr Val Met Ala Tyr Asp Arg Tyr Met Ala Ile Cys Lys
                            120
Pro Leu Leu Tyr Thr Ser Lys Met Ser Arg Ser Val Cys Leu Ser Leu
                        135
                                             140
Val Ala Ala Pro Tyr Ile Tyr Gly Phe Ala Asn Gly Leu Ala Gln Thr
                    150
                                         155
Ile Leu Met Leu Arg Leu Thr Phe Cys Gly Pro Asn Glu Ile Asn His
                165
                                     170
Phe Tyr Cys Ala Asp Pro Pro Leu Met Val Leu Ala Cys Ser Asp Thr
            180
                                 185
Tyr Val Lys Glu Thr Ala Met Phe Val Val Ala Gly Ser Asn Leu Thr
        195
                            200
                                                 205
Cys Ser Leu Thr Ile Ile Leu Ile Ser Tyr Ile Phe Ile Phe Thr Ala
                        215
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                         235
Cys Gly Ser His Leu Ile Ala Val Thr Val Phe Tyr Gly Thr Leu Phe
                245
                                     250
Cys Met Tyr Leu Arg Pro Pro Ser Glu Lys Ser Val Glu Gln Gly Lys
                                 265
Ile Val Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Leu Ser Asn Ala
        275
                            280
Leu Val Val Ser
    290
<210> 2240
<211> 247
<212> PRT
<213> Mus musculus
<400> 2240
Met Ser Leu Thr Asn Ile Glu Phe Ile Leu Leu Gly Leu Thr Asp Arg
                 5
                                    10
Ser Glu Phe Gln Pro Leu Leu Phe Val Leu Phe Leu Phe Ile Tyr Leu
            20
Val Thr Val Leu Gly Asn Met Cys Ile Met Ala Leu Ile Arg Leu Asp
                            40
Ser His Leu His Lys Pro Ile Tyr Phe Phe Leu Ser Asn Leu Ala Phe
                        55
                                            60
Val Asp Leu Cys Tyr Thr Ser Thr Ala Thr Pro Gln Ile Leu Thr Asn
                    70
                                        75
Val Thr Ile Ser Phe Ile Gly Cys Phe Gln Cys Tyr Leu Leu Pro Thr
                                    90
                85
Phe Tyr Met Leu Ala Pro Met Ala Tyr Asp Leu Tyr Val Ala Ile Cys
                                105
Asn Pro Leu His Tyr Ser Leu Lys Met Tyr Arg Gln Asp Cys Ile Cys
```

```
115
                            120
Leu Ala Met Cys Pro Tyr Ile Tyr Gly Phe Ser Asp Gly Leu Phe Gln
                        135
                                            140
Ala Ile Leu Thr Leu Ser Ile Met Ser Tyr Lys Ser Ser Val Ile Asn
                    150
                                         155
His Phe Tyr Cys Ala Asp Pro Pro Leu Ile Lys Leu Ser Tyr Ser Asp
                                    170
Ile Tyr Ile Lys Glu His Ala Met Leu Ile Ser Ala Gly Phe Asn Leu
                                185
                                                     190
Ser Asn Ser Leu Lys Ile Ile Leu Val Ser Tyr Ala Phe Ile Met Ala
                            200
Ala Ile Leu Arg Met Lys Ser Ala Gly Gly Arg His Lys Ser Phe Ser
                        215
Ser Cys Asp Ser His Met Arg Ala Val Thr Leu Phe Tyr Gly Thr Leu
                    230
Phe Cys Met Tyr Val Arg Pro
                245
<210> 2241
<211> 321
<212> PRT
<213> Mus musculus
<400> 2241
Met Ala Gly Ser Asn Ala Thr Ala Val Thr Glu Phe Ile Leu Leu Gly
Phe Val Val Gln Arg Glu Val Glu Ile Ile Leu Phe Leu Ile Ile Leu
Val Ile Tyr Thr Leu Thr Leu Val Gly Asn Val Gly Met Ile Ser Leu
        35
Ile Ser Met Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ala Phe Val Asp Leu Cys Tyr Ser Ser Ser Val Ala Pro Lys
                    70
                                        75
Phe Leu Glu Thr Leu Leu Ser Asn Arg Arg Ser Ile Ser Phe Tyr Ala
                                    90
Cys Ala Thr Gln Leu Gly Phe Phe Leu Asn Phe Leu Ile Ser Glu Met
                                105
                                                     110
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                 125
Pro Leu Leu Tyr Met Val Val Met Ser Gln Lys Val Cys Leu Arg Leu
                                            140
Val Met Gly Pro Tyr Phe Tyr Ser Phe Ala Val Ala Leu Leu His Thr
                                        155
Val Val Thr Phe Lys Leu Ile Tyr Cys Gly Pro Asn Ile Ile Asn His
                                    170
Phe Tyr Cys Asp Asp Val Pro Leu Met Ala Leu Ala Cys Ser Asp Thr
            180
                                185
                                                    190
Ser Leu Lys Glu Ile Leu Ile Phe Ser Phe Ala Gly Phe Asn Met Ile
       195
                            200
Ser Ser Leu Thr Thr Val Leu Ile Ser Tyr Leu Tyr Ile Val Ala Ala
                        215
Ile Leu Arg Ile Gln Ser Thr Glu Gly Arg Tyr Lys Ala Phe Ser Thr
                    230
                                        235
```

Cys Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu Ile

Phe Met Tyr Leu Gln Pro Lys Ser Ser His Ser Leu Asp Thr Asp Lys

265

260

```
Met Ala Ser Val Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Met 275

Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Ser Ala Leu Arg Lys Ala 290

Leu Glu Lys Cys Tyr Leu Leu Pro Leu Met His Leu Lys Lys Gly Ile 305

Ser

<210> 2242
<211> 171
<212> PRT
<2400> 2242
<400> 2242
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<400> 2242 Tyr Ser Phe Ala Val Ala Leu Leu His Thr Val Val Thr Phe Lys Leu Ile Tyr Cys Gly Pro Asn Ile Ile Asn His Phe Tyr Cys Asp Asp Val 20 25 Pro Leu Met Ala Leu Ala Cys Ser Asp Thr Ser Leu Lys Glu Ile Leu 40 45 Ile Phe Ile Phe Ala Gly Phe Asn Met Ile Ser Ser Leu Thr Thr Val 55 Leu Ile Ser Tyr Leu Tyr Ile Val Ala Ala Ile Leu Arg Ile Gln Ser 70 75 Thr Glu Gly Arg Cys Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr 85 90 Ala Val Thr Ile Phe Tyr Gly Thr Leu Ile Phe Met Tyr Leu Gln Pro 100 105 110 Lys Ser Ser His Ser Leu Asp Thr Asp Lys Met Ala Ser Val Phe Tyr 120 125 115 Thr Ile Val Ile Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn 135 140 Gln Glu Val Lys Ser Ala Leu Arg Lys Ala Leu Glu Lys Cys Tyr Leu 150 155 Leu Pro Leu Met His Leu Lys Lys Gly Ile Ser 165

<210> 2243 <211> 183 <212> PRT <213> Mus musculus

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100
                                 105
Gly Ser His Leu Thr Ala Val Ser Met Phe Tyr Gly Thr Leu Ile Phe
                            120
                                                 125
Met Tyr Leu Arg Arg Pro Thr Glu Glu Ser Val Glu Gln Gly Lys Met
                        135
                                             140
    130
Val Ala Val Phe Tyr Thr Ser Val Ile Pro Met Leu Asn Pro Met Ile
                    150
                                         155
Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Val Tyr Lys Ile Val
                                     170
Ala Lys Ala Asn Leu Arg Lys
            180
<210> 2244
<211> 154
<212> PRT
<213> Mus musculus
<400> 2244
Cys Thr Leu Trp Thr Tyr Gly Leu Tyr Phe Cys Gly Asn Val Lys Ile
                                     10
                                                         15
Asn His Phe Tyr Cys Ala Asp Pro Pro Leu Ile Lys Ile Ala Cys Gly
            20
                                 25
Gly Val His Ile Lys Glu Tyr Thr Met Ile Val Ile Ala Gly Ile Asn
                             40
Phe Thr Tyr Ser Leu Ser Val Val Leu Ile Ser Tyr Val Leu Ile Val
                        55
                                             60
Val Ala Val Leu Arg Met His Ser Ala Asp Gly Arg Arg Lys Ala Phe
                    70
                                         75
Ser Thr Cys Gly Ser His Leu Thr Ala Val Ser Met Phe Tyr Gly Thr
                                     90
                                                         95
Leu Ile Phe Met Tyr Leu Arg Arg Pro Thr Glu Glu Ser Val Glu Gln
                                                     110
            100
                                 105
Gly Lys Met Val Ala Val Phe Tyr Thr Ser Val Ile Pro Met Leu Asn
                            120
Pro Met Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Val Cys
                        135
                                             140
Lys Ile Val Ala Lys Ala Asn Leu Arg Lys
145
                    150
<210> 2245
<211> 271
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (92)...(156)
<223> Any amino acid
<400> 2245
Met Pro Leu Thr Asn Ser Thr Lys Ile Thr Glu Phe Ile Leu Leu Gly
                                     10
Leu Thr Asp Arg Pro Glu Leu Gln Pro Leu Leu Phe Val Leu Phe Leu
                                 25
            20
Phe Val Tyr Ile Val Thr Val Leu Gly Asn Met Gly Met Val Ala Leu
        35
Ile Arg Leu Asp Ser Arg Leu His Lys Pro Met Tyr Phe Phe Leu Ser
```

```
Asn Leu Ala Phe Val Asp Leu Cys Tyr Thr Ser Thr Ala Thr Pro Gln
                70
Met Leu Thr Asn Phe Leu Ser Glu Lys Lys Thr Xaa Xaa Xaa Xaa Xaa
                            90
100
                         105
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa
      115
                      120
                                      125
135
                                   140
150
                                155
Ile Leu Val Ser Tyr Ala Phe Ile Ile Ala Ala Ile Leu Arg Ile Lys
            165
                            170
Ser Ala Glu Gly Arg His Lys Ala Phe Ser Thr Cys Gly Ser His Met
         180
                         185
                                         190
Met Ala Val Thr Leu Phe Tyr Gly Thr Leu Phe Cys Met Tyr Val Arg
      195
                      200
Pro Pro Thr Asp Lys Thr Val Glu Glu Ser Lys Ile Ile Ala Val Phe
                   215
                                   220
Tyr Thr Phe Val Ser Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg
                230
                                235
Asn Lys Asp Val Lys Gln Ala Leu Lys Thr Ile Leu Arg Gln Asn Val
            245
                            250
Ile Arg Thr Ala Leu Met Arg Pro Pro Ser Asn Lys Leu Gln Gln
```

<210> 2246

<211> 313

<212> PRT

<213> Mus musculus

<400> 2246

Met Glu Arg Lys Asn Gln Thr Thr Val Leu Glu Phe Leu Phe Leu Gly 10 Leu Thr Asp Tyr Leu His Gln Lys Val Val Leu Phe Ile Ile Phe Phe 25 Leu Val Tyr Leu Val Thr Leu Ala Gly Asn Val Gly Met Ile Asn Leu Ile Trp Val Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ala Phe Val Asp Val Cys Ser Ser Ser Cys Val Ala Pro Lys 70 75 Met Leu Ser Asp Ile Phe Ala Glu Lys Lys Ala Ile Ser Phe Met Gly 90 Cys Ala Ala Gln Met Trp Phe Phe Gly Leu Phe Val Thr Thr Asp Cys 105 110 Phe Leu Leu Ala Ala Met Ala Tyr Asp Tyr Thr Ala Val Cys Lys Pro 120 Leu Leu Tyr Ser Val Ile Met Ser Lys Arg Val Cys Val Gln Phe Val 140 Ile Gly Pro Tyr Leu Leu Ala Ala Ile Asn Ile Thr Thr His Thr Thr 150 155 Leu Thr Phe Cys Leu Pro Phe Cys Gly Ser Asn Thr Ile Asn His Phe 170 Phe Cys Asp Val Ser Pro Leu Leu Ser Leu Ala Cys Ala Asp Thr Trp 185 190

```
Ile Asn Lys Val Val Leu Phe Val Leu Ala Gly Val Ile Gly Val Pro
        195
Ser Gly Leu Ile Ile Ile Val Ser Tyr Val Cys Ile Leu Val Ala Ile
Leu Lys Ile Lys Thr Ala Asp Gly Arg Gln Lys Ala Phe Ser Thr Cys
                    230
Ser Ser His Leu Ala Ala Val Ser Ile Leu Tyr Gly Thr Leu Phe Phe
                                    250
Ile Tyr Val Arg Pro Asn Ala Ser Ser Ser Leu Asp Ile Asn Lys Val
            260
                                265
Ile Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Ser Arg Asn Lys Glu Val Lys Asp Ala Val Lys Arg Ile Leu
                        295
Arg Ser Asn His Phe Leu Thr Gly Ala
                    310
<210> 2247
<211> 294
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (95)...(101)
<223> Any amino acid
<400> 2247
Met Asp Glu Glu Asn Ile Thr Glu Val Thr Glu Phe Ile Leu Leu Gly
Phe Thr Glu Asp Ala Val Leu Gln Gln Val Leu Phe Phe Ile Phe Leu
            20
                                25
Thr Ile Tyr Ile Ile Ser Leu Leu Gly Asn Ile Thr Leu Ile Ser Leu
                            40
Ile Cys Ala Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Ile Gly
                        55
Asn Leu Ser Phe Leu Asp Leu Trp Tyr Ser Ser Val Tyr Ala Pro Lys
                    70
                                         75
                                                             80
Ile Leu Ile Thr Cys Ile Thr Glu Asp Lys Ser Ile Ser Phe Xaa Xaa
                                    90
                85
Xaa Xaa Xaa Xaa Ala Tyr Asp Arg Tyr Val Ala Ile Ser Asn Pro
            100
                                105
Leu Leu Tyr Phe Gln Ala Met Ser Pro Arg Leu Arg Ala Ser Leu Val
                            120
Ala Ala Ser Tyr Leu Gly Gly Phe Ala Asn Ser Thr Ile Ile Thr Ser
                        135
                                             140
Glu Thr Phe Thr Leu Ser Phe Cys Arg Asp Asn Ile Ile Asp Asp Phe
                    150
Phe Cys Asp Leu Pro Pro Leu Val Lys Leu Ala Cys Asp Val Lys Glu
                165
                                    170
                                                         175
Ser Tyr Gln Ala Val Leu Tyr Phe Ile Leu Ala Ser Asn Val Ile Thr
                                185
                                                     190
Pro Thr Val Leu Ile Leu Ala Ser Tyr Leu Phe Ile Ile Val Ala Ile
                            200
                                                 205
Leu Lys Ile Arg Ser Thr Gln Gly Arg Leu Lys Ala Phe Ser Thr Cys
                        215
                                            220
Gly Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly Ser Ile Leu Phe
                                         235
                    230
```

```
Ile Tyr Ser Arg Pro Ser Thr Ser Tyr Ala Leu Glu Arg Asp Lys Val
                245
                                    250
Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Met Ile
                                265
Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Leu Arg Lys Met Leu
                            280
Asp Ile Val Lys Leu Ser
   290
<210> 2248
<211> 153
<212> PRT
<213> Mus musculus
<400> 2248
Thr Ala Asn Thr Phe Gln Leu Thr Phe Cys Gly Glu Asn Ile Ile Asp
His Phe Phe Cys Asp Ala Pro Pro Leu Val Lys Met Leu Cys Thr Asp
                                25
Thr Arg Val Tyr Glu Lys Val Leu Leu Gly Val Val Gly Phe Thr Met
Leu Ser Ser Ile Leu Ala Ile Leu Ile Ser Tyr Phe Asn Ile Leu Leu
                        55
Ala Ile Leu Arg Ile Cys Ser Ala Ser Gly Arg His Asn Ala Phe Ser
Thr Cys Ala Ser His Leu Val Ser Val Met Leu Phe Tyr Gly Pro Phe
                                    90
Leu Phe Met Tyr Ser Arg Pro Ser Ser Thr Tyr Ser Leu Glu Lys Asp
            100
                                105
Lys Val Ala Ala Leu Phe Tyr Thr Val Asp Asn Pro Leu Phe Asn Pro
                            120
                                                125
        115
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Phe Arg Lys
                        135
Ala Ser Gln Thr Ile Gln Pro His Thr
                    150
<210> 2249
<211> 316
<212> PRT
<213> Mus musculus
<400> 2249
Met Lys Asp Lys Asn Glu Thr Thr Val Ser Glu Ser Leu Phe Leu Ser
Leu Thr Asn Arg Leu Tyr Gln Lys Ser Ile Leu Phe Ile Leu Phe Leu
Phe Val Tyr Leu Val Thr Leu Gly Gly Gly Asn Leu Ser Met Val Thr
Leu Ile Trp Val Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu
```

Ser His Leu Ser Phe Val Asp Met Cys Ser Ser Ser Ser Ile Ala Pro

Arg Met Val Tyr Asp Ile Phe Thr Glu Glu Lys Ile Lys His Phe Phe

Leu Gly Cys Thr Val Gln Leu Trp Phe Ala Gly Leu Phe Val Gly Thr

Gly Cys Phe Leu Leu Ala Asn Met Ala Tyr Glu Trp Tyr Thr Ala Ile

```
120
        115
Cys Lys Pro Leu Leu Tyr Thr Leu Ile Val Ser Lys Ser Val Cys Thr
                        135
   130
                                            140
Gln Phe Val Ile Gly Pro Tyr Leu Leu Ala Ala Ile Asn Ile Thr Thr
                    150
                                        155
His Glu Thr Leu Thr Phe Cys Leu Pro Phe Cys Gly Pro Asn Thr Ile
                165
                                    170
Asn His Phe Phe Cys Asp Ile Ser Pro Met Leu Val Leu Pro Cys Ala
            180
                                185
Asp Ser Ser Ile Asn Glu Ile Val Ile Phe Val Leu Asp Gly Thr Ile
        195
                            200
                                                205
Gly Met Leu Ser Asp Leu Ile Ile Thr Val Ser Tyr Ile Ser Ile Leu
                        215
                                            220
Met Ala Ile Leu Lys Ile Gln Thr Thr Asp Glu Arg Met Lys Asp Phe
                    230
                                        235
Ser Ser Cys Ser Ser His Leu Ala Gly Val Ser Ile Gln Tyr Gly Thr
                245
                                    250
Val Phe Phe Ile Tyr Val Gln Pro Ser Thr Tyr Thr Ser Leu Asn Thr
            260
                                265
Asn Lys Val Ile Ser Leu Phe Tyr Thr Val Met Ile Ser Met Leu Asn
                            280
                                                285
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Met Lys Asn Ala Leu Arg
                        295
                                            300
Arg Lys Val Gln Arg Lys His Phe Ser Arg Asp Trp
                    310
```

<210> 2250

<211> 320

<212> PRT

<213> Mus musculus

<400> 2250

Met Tyr Phe Leu Ser Ile Ile Asn Ile Met Lys Arg Gly Asn Val Ser 1.0 Glu Ser Thr Glu Phe His Leu Met Gly Leu Ser Asp Asn Gln Glu Leu Gln Pro Val Leu Phe Gly Val Phe Leu Thr Ile Tyr Leu Ile Thr Leu Phe Gly Asn Leu Leu Ile Ile Leu Ala Thr Ile Phe Asp Ser Asn Leu His Thr Pro Met Tyr Phe Phe Ile Ser Asn Leu Ser Phe Ile Asp Ile Cys Phe Thr Thr Thr Ile Pro Lys Met Leu Val Asn Ile Gln Ala Gln Val Asn Ser Ile Ser Tyr Thr Gly Cys Leu Thr Gln Ile Cys Phe Val Leu Ala Phe Ala Gly Leu Glu Asn Glu Ile Leu Val Met Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro Leu Arg Tyr Thr Val Ile Met Asn Pro Lys Leu Cys Gly Val Met Val Leu Leu Ser Leu Leu Ser Ile Leu Asp Ala Leu Leu His Thr Leu Met Ala Leu Arg Leu Ser Phe Cys Thr Lys Leu Glu Ile Pro His Phe Phe Cys Glu Leu Ala His Ile Leu Lys Leu Ala Cys Ser Asn Ile Leu Ile Asn Asn Ile Leu Val Tyr

```
Leu Val Thr Ser Leu Phe Gly Ile Leu Pro Leu Ser Gly Ile Ile Tyr
                        215
Ser Tyr Thr Lys Ile Ile Ser Ser Val Leu Lys Ile Pro Ser Ala Ala
                    230
                                        235
Gly Lys Tyr Lys Val Phe Ser Thr Cys Val Ser His Leu Val Val Val
                245
Ile Leu Phe Tyr Gly Thr Gly Phe Gly Val Tyr Leu Ser Ser Ala Gly
                                265
Thr His Ser Ser Arg Met Ser Ala Ile Ala Ser Val Met Tyr Thr Val
                            280
Val Thr Pro Thr Met Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp
                        295
Met Val Asn Ala Phe Lys Lys Leu Ile Ser Arg Ile Thr Thr Ser Leu
                    310
<210> 2251
<211> 312
<212> PRT
<213> Mus musculus
```

<400> 2251 Met Lys Arg Gly Asn Val Ser Glu Ser Thr Glu Phe His Leu Met Gly Leu Ser Asp Asn Gln Glu Leu Gln Pro Val Leu Phe Gly Val Phe Leu 20 Ser Ile Tyr Leu Ile Thr Met Phe Gly Asn Leu Leu Ile Ile Leu Ala 35 40 Thr Val Phe Asp Ser Asn Leu His Thr Pro Met Tyr Phe Phe Ile Ser Asn Leu Ser Phe Ile Asp Ile Cys Phe Thr Thr Thr Ile Pro Lys 70 75 Met Leu Val Asn Ile Gln Ala Gln Val Asn Ser Ile Ser Tyr Thr Gly 90 Cys Leu Thr Gln Ile Cys Phe Val Leu Ala Phe Ala Gly Leu Glu Asn 105 Gly Ile Leu Val Met Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His 120 Pro Leu Arg Tyr Thr Val Ile Met Asn Pro Lys Ile Cys Gly Val Met 135 Val Leu Leu Ser Phe Leu Ile Ser Ile Leu Asp Ala Leu Leu His Thr 150 155 Leu Met Ala Leu His Leu Ser Phe Cys Thr Lys Val Glu Ile Pro His 170 Phe Phe Cys Glu Leu Ala His Ile Leu Lys Leu Ala Cys Ser Asn Ile 180 185 Leu Ile Asn Asn Ile Leu Val Tyr Leu Val Thr Ser Leu Leu Gly Val 200 205 Leu Pro Leu Ser Gly Ile Ile Tyr Ser Tyr Thr Arg Ile Ile Ser Ser 215 220 Val Leu Lys Ile Pro Ser Ala Ala Gly Lys Tyr Lys Val Phe Ser Ile 230 235 Cys Ala Ser His Leu Val Val Ile Leu Phe Tyr Gly Thr Gly Phe 245 250 255 Gly Val Tyr Leu Ser Ser Ala Gly Thr His Ser Ser Arg Lys Ser Ala 260 265 270 Ile Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Met Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Lys Asp Met Val Ser Ala Phe Lys Lys Leu

```
300
   290
                       295
Ile Ser Arg Ile Thr Thr Ser Leu
                   310
<210> 2252
<211> 117
<212> PRT
<213> Mus musculus
<400> 2252
Ile Glu Phe Tyr Phe Val Phe Ser Val Leu Leu Leu Glu Arg Cys Asn
                                    10
                                                        15
Ser Glu Thr Lys Gln Leu Phe Leu Glu Phe His Leu Leu Gly Leu Thr
           20
                                25
Asn Asp Pro Glu Leu Glu Pro Leu Ile Tyr Gly Leu Phe Arg Leu Tyr
                            40
Leu Phe Thr Ile Leu Gly Asn Ile Val Ile Leu Leu Ala Ile Phe Ser
                       55
Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Arg Leu Ser
                   70
                                        75
Ile Asn Asp Val Cys Leu Ser Ile Ser Thr Ile Pro Lys Met Leu Val
              85
                                    90
Asn Ser Gln Ala Gln Asp Asn Lys Ile Ser Tyr Ile Gln Cys Ile Ser
                                105
           100
                                                    110
Gln Ile Tyr Phe Val
       115
<210> 2253
<211> 178
<212> PRT
<213> Mus musculus
<400> 2253
Val Ile Ser Phe Leu Val Ala Ala Arg Ser Lys Ser Gly Ser Ala Cys
1
                 5
                                    10
Phe Lys Val His Ser Leu Met Val Leu Gln Leu Ser Phe Gly Thr Asn
           20
                                25
                                                    30
Leu Glu Ile His Asn Phe Phe Cys Glu Leu Ala Gln Val Leu Asn Leu
                            40
                                                45
Ala Cys Phe Asp Thr Phe Ile Asn Asn Leu Leu Ile Leu Val Ala Val
50
                       55
Phe Ile Phe Met Ser Gly Gln Val Cys Gly Val Ile Phe Ser Tyr Thr
                   70
                                        75
Tyr Ile Leu Leu Ser Val Leu Arg Met Thr Ser Gln Thr Gly Lys Lys
                                    90
                                                        95
                85
Lys Ala Phe Ser Thr Cys Thr Ser His Leu Ser Val Ile Phe Leu Phe
           100
                                105
                                                    110
Tyr Gly Ser Cys Leu Gly Val Tyr Phe Ser Ser Ser Val Ala Glu Phe
       115
                            120
                                                125
Thr Arg His Ser Ala Val Ala Ser Val Met Tyr Thr Val Asp Pro Gln
                                            140
    130
                       135
Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg His Glu Glu Ser
                                       155
                   150
Leu Ser Glu Ile His Trp Leu Asp Ile Leu Gly Ser Pro Leu Cys Ser
                                    170
                                                        175
Leu Ile
```

```
<210> 2254
<211> 308
<212> PRT
<213> Mus musculus
<400> 2254
Met Glu Leu Cys Asn Val Thr Ser Thr Leu Glu Phe Leu Leu Gly
Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Leu Phe Ala Leu Phe Leu
                                25
Leu Ile Tyr Leu Leu Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
                            40
Ile Ser Ser Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Tyr
Asn Leu Ser Leu Ser Asp Met Gly Phe Ser Ser Thr Thr Ile Pro Lys
                    70
                                        75
Met Leu Ile Asn Thr Gln Thr His Asn Lys Ser Ile Thr Tyr Ala Ala
                                    90
Cys Leu Thr Gln Val Pro Phe Phe Leu Phe Gly Cys Met Asp Ser
            100
                                105
Leu Leu Thr Val Lys Ala Cys Asp Trp Val Ala Ile Cys Tyr Ser
                            120
Leu Tyr Tyr Gln Ile Ile Leu Asn Pro Cys Leu Cys Lys Cys Leu Val
                        135
                                            140
Ile Val Ser Phe Phe Ile Ser Pro Met Asp Ser Gln Val His Phe Phe
                    150
                                        155
Met Val Ser Gln Leu Lys Phe Cys Thr Asn Leu Glu Ile Pro His Phe
                165
                                    170
Phe Ser Asp Gly Thr Glu Ile Leu Lys Leu Ala Cys Thr Asp Ile Thr
            180
                                185
                                                    190
Ile Ile Asn Ile Ala Ile Phe Leu Val Asn Ile Ile Ala Gly Phe Leu
        195
                            200
Pro Ala Leu Gly Ile Phe Tyr Ser Tyr Tyr Lys Ile Ile Ser Ser Ile
                        215
                                            220
Val Arg Val Leu Ser Ser Leu Gln Lys Tyr Lys Asp Phe Ser Thr Cys
                    230
                                        235
Gly Phe His Leu Ser Val Val Cys Leu Phe Tyr Gln Thr Gly Ile Gly
                245
                                    250
Val Tyr Leu Ser Thr Tyr Ile Ser Ser Ser Ser Lys Glu Cys Val Val
            260
                                265
Ala Leu Val Ile Tyr Thr Met Val Val Pro Met Met Asn Pro Phe Ile
                            280
Tyr Ile Leu Arg Asn Arg Asp Ile Lys Asn Asn Leu Gln Lys Ile Phe
    290
                        295
Thr Gln Ile Lys
305
<210> 2255
<211> 321
<212> PRT
<213> Mus musculus
<400> 2255
Met Glu Ser Tyr Asn Leu Thr Arg Thr Leu Glu Phe Leu Leu Gly
                                    10
Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Leu Phe Val Leu Phe Leu
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```
Leu Ile Tyr Leu Leu Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
                            40
Ile Ser Ser Asp Ser Arg Leu His Ser Pro Met Tyr Phe Phe Leu Phe
                        55
                                            60
Asn Leu Ser Leu Ser Asp Met Gly Phe Ser Ser Thr Thr Met Pro Lys
                    70
                                         75
                                                             80
Met Leu Val Asn Met Gln Thr His Lys Lys Ser Ile Thr His Ser Glu
                                     90
Cys Leu Thr Gln Val Ser Phe Phe Phe Leu Phe Gly Asp Met Gly Gly
                                105
Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Trp Val Ala Ile Cys His
                            120
Pro Leu His Tyr Gln Val Ile Leu Asn Pro Cys Leu Cys Arg Cys Leu
                        135
                                            140
Val Ile Ala Ser Phe Phe Ile Ser Leu Val Ser Ser Gln Ile His Cys
                    150
                                         155
                                                             160
Leu Met Val Ser Gln Leu Thr Phe Cys Thr Asn Met Glu Ile Pro His
                                    170
Phe Phe Cys Asp Val Thr Glu Leu Leu Lys Leu Ala Cys Ser Asp Thr
            180
                                185
                                                     190
Ser Ile Asn Asn Ile Val Arg Phe Leu Leu Ser Ile Ile Leu Gly Phe
                            200
Leu Pro Val Ser Gly Ile Phe Tyr Ser Tyr Tyr Lys Ile Thr Ser Ser
                        215
                                             220
Ile Phe Lys Val Pro Ser Leu Leu Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                         235
Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr Gly Ile
                                     250
                                                         255
Gly Val Tyr Leu Ser Ser Thr Val Ser Ser Ser Ser Arg Lys Ser Val
                                265
                                                     270
Val Ala Ser Val Met Tyr Thr Met Val Val Pro Met Met Asn Pro Phe
                            280
                                                 285
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Lys Ala Leu His Lys Ile
                        295
                                             300
Val Lys Gln Ile Met Leu Thr Thr Leu Asn Asp Pro Leu Ile Tyr Ser
305
                    310
                                         315
Phe
```

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<210> 2256
<211> 195
<212> PRT
<213> Mus musculus
```

<400> 2256

 Met
 Ser
 Tyr
 Asp by and standard stand

<210> 2257 <211> 312 <212> PRT <213> Mus musculus

<400> 2257

Met Lys Asn His Ser Val Ile Thr Glu Phe Val Leu Leu Gly Ile Ser 10 Asp Asp Pro Glu Val Gln Val Val Ile Phe Ile Leu Leu Phe Ile Ala 25 Tyr Ile Leu Ser Val Thr Gly Asn Leu Thr Ile Ile Ile Leu Thr Leu 40 Leu Asp Ser Gln Leu Lys Thr Pro Met Tyr Phe Phe Leu Gln Asn Phe 55 Ser Phe Leu Glu Ile Ile Phe Thr Ser Val Ser Ile Pro Arg Phe Leu 75 Glu Ser Ile Ile Thr Lys Val Lys Thr Ile Ser Tyr Asn Asn Cys Leu Ala Gln Leu Tyr Phe Phe Ile Ser Met Gly Val Ser Glu Phe Phe Leu 100 105 110 Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Thr Leu Ile Met Asn Gln Lys Val Cys Thr Leu Leu Val Leu 135 140 Ala Ser Trp Leu Ala Gly Phe Leu Thr Ile Phe Pro Pro Leu Met Leu 150 155 Val Leu Lys Leu Asp Phe Cys Ala Ser Asn Val Ile Asp His Phe Ser 165 170 Cys Asp Tyr Phe Pro Ile Leu Gln Leu Ser Cys Ser Asp Thr Arg Ser 185 190 Leu Glu Met Ile Gly Phe Tyr Phe Ala Phe Ile Thr Leu Leu Phe Thr 200 205 Leu Ala Leu Val Ile Leu Ser Tyr Ile Ser Ile Ile Ser Thr Ile Leu 215 220 Arg Phe Pro Ser Ala Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser 230 235 Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met 250 Tyr Val Lys Pro Ser Ala Asn Glu Arg Ala Ser Leu Thr Lys Gly Val 265 Ala Val Leu Asn Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Glu Gln Val Lys Gln Ala Phe Lys Asp Leu Ile Asn

<210> 2259 <211> 145 <212> PRT <213> Mus musculus 310

<400> 2259

```
Phe Cys Ala Ser Asn Val Ile Asp His Phe Leu Cys Asp Val Ser Pro
Leu Leu Gln Leu Ser Cys Ser Asp Thr Ser Leu Leu Glu Val Met Ala
Phe Ile Leu Ala Leu Met Thr Leu Ile Val Thr Leu Ile Ile Val Ile
Leu Ser Tyr Ala His Ile Val Lys Thr Ile Ile Lys Phe Pro Ser Ala
Gln Gln Lys Lys Lys Ala Phe Ser Thr Cys Ser Ser His Met Ile Val
                                        75
Val Ser Leu Thr Tyr Gly Ser Cys Ile Phe Ile Tyr Ile Lys Pro Ser
Ala Asn Glu Arg Val Thr Leu Ser Lys Gly Ile Ala Val Leu Asn Thr
Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys
                            120
Gln Val Lys Gln Ala Cys Gly Ala Ile Leu Arg Lys Ile Phe Ser Ala
                        135
Ser
145
```

<210> 2260 <211> 313 <212> PRT

<213> Mus musculus

<400> 2260

Met Ser Val Ala Asn Glu Ser Ile Ser Arg Glu Phe Ile Leu Leu Gly Phe Ser Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe Val Val Phe Leu Val Ser Tyr Ile Leu Thr Ile Phe Gly Asn Met Met Ile Ile Leu Val 35 Ser Arg Leu Asp Ser Lys Leu His Thr Pro Met Tyr Phe Phe Leu Thr 55 Asn Leu Ser Leu Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln 70 75 Met Leu Ile Asn Ile Cys Ser Thr Arg Lys Val Ile Ser Tyr Gly Gly 90 Cys Val Ala Gln Leu Phe Ile Phe Leu Ala Leu Gly Ser Thr Glu Cys Phe Leu Leu Gly Val Met Ser Phe Asp Arg Phe Val Ala Ile Cys Arg 120 125 Pro Leu His Tyr Ser Val Ile Met His Gln Arg Arg Cys Leu Gln Leu 140 Ala Ala Cys Trp Ile Ser Gly Phe Ser Asn Ser Val Leu Gln Ser 150 155 Thr Trp Thr Leu Gln Met Pro Leu Cys Gly His Lys Glu Val Asp His 170 175 Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Asp Thr 185 Thr Ala Asn Glu Ala Glu Leu Phe Phe Ile Ser Val Leu Phe Leu Leu 200 Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Gln Ala 215 220 Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Gly Thr 230 235 Cys Gly Ser His Leu Ile Val Val Leu Phe Tyr Gly Thr Ala Ile

```
245
                                    250
Tyr Met Tyr Leu Gln Pro Pro Ser Pro Thr Ser Lys Asp Arg Gly Lys
                                             270
                                265
Met Val Ser Leu Phe Tyr Gly Ile Ile Thr Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Phe Lys Arg Leu
                        295
Val Thr Arg Ile Ile Leu Ser Arg Lys
<210> 2261
<211> 314
<212> PRT
<213> Mus musculus
<400> 2261
Met Asn Arg Ala Asn Gly Ser Ile Phe Ser Gly Phe Ile Leu Leu Gly
Phe Ser Asn Arg Pro Gln Leu Glu Thr Ala Leu Phe Phe Ala Met Leu
            20
                                25
Leu Ile Tyr Phe Leu Ser Phe Leu Gly Asn Ser Thr Ile Ile Leu Leu
                            40
Ser Val Ile Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
Asn Leu Ser Phe Met Asp Leu Cys Leu Thr Thr Arg Thr Val Pro Gln
                    70
Thr Leu Phe Asn Phe Lys Gly Lys Asp Lys Thr Ile Thr Tyr Gly Gly
                                    90
Cys Val Thr Gln Leu Phe Ile Ala Leu Gly Leu Gly Gly Val Glu Cys
            100
                                105
Ile Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Arg
                            120
        115
                                                125
Pro Leu His Tyr Met Val Ile Met His Pro Gln Leu Cys Ile Lys Met
                        135
                                            140
Val Ile Thr Ala Trp Leu Thr Gly Phe Gly Asn Ser Val Val Gln Thr
                    150
                                        155
Ala Leu Thr Met Ser Arg Pro Leu Cys Gly Arg Asn Gln Leu Asp His
                                    170
                                                        175
Phe Phe Cys Glu Val Pro Val Met Leu Lys Leu Thr Cys Ala Asn Ser
            180
                                185
Phe Ile Asn Glu Ala Glu Leu Phe Ala Val Ser Val Phe Phe Leu Val
        195
                            200
Val Pro Leu Ser Leu Ile Leu Val Ser Tyr Gly Tyr Ile Thr His Ala
                        215
                                            220
Val Leu Lys Ile Lys Ser Ala Gln Gly Arg Arg Lys Ala Phe Gly Thr
                    230
                                        235
Cys Gly Ser His Leu Leu Val Val Ile Ile Phe Phe Gly Thr Leu Ile
                                    250
Ser Met Tyr Leu Gln Pro Pro Ser Ser Tyr Ser Gln Asp Val Asn Lys
                                265
Ser Met Ala Leu Phe Tyr Thr Leu Val Thr Pro Leu Leu Asn Pro Leu
                            280
Ile Tyr Thr Leu Arg Asn Arg Glu Val Lys Ser Ala Leu Arg Arg Ile
                        295
                                            300
Met Gly Arg Arg Thr Asp Ser Thr Lys Ser
                    310
```

```
<210> 2262
<211> 231
<212> PRT
<213> Mus musculus
<400> 2262
Met Ser Asn His Thr Arg Val Thr His Phe Ile Leu Arg Gly Phe Ser
                                    10
Asp Val Pro Gln Leu Arg Leu Val Leu Ile Pro Phe Phe Leu Phe Phe
                                25
Tyr Thr Phe Gly Ile Leu Gly Asn Phe Ser Ile Ile Thr Ala Val Thr
                            40
Arg Asp Ser Arg Leu His Ser Pro Met Tyr Phe Phe Leu Lys Asn Leu
    50
Ser Phe Leu Asp Ile Cys Tyr Thr Ser Ala Thr Ile Pro Lys Ala Val
                    70
                                        75
Val Ile Ser Leu Thr Gly Ser Gly Val Ile Ser Tyr Gln Glu Cys Ala
                                    90
                                                         95
Ala Gln Leu Tyr Ile Ile Phe Thr Phe Ala Cys Thr Glu Cys Phe Leu
                                105
            100
Leu Thr Ala Met Ala Tyr Asp Arg Cys Leu Ala Ile Leu Arg Pro Leu
                            120
Ile Tyr Gly Thr Ile Met Ser Gln Lys Tyr Cys Ser Ala Leu Val Val
    130
                        135
                                            140
Thr Ala Trp Val Gly Gly Ala Ile Tyr Ser Ala Phe His Thr Phe Asn
                    150
                                        155
Thr Phe Ser Leu Pro Tyr Cys Gly Pro Asn Val Ile Asp His Phe Phe
                                    170
Cys Asp Met Pro Pro Val Met Arg Leu Ser Cys Thr Asp Tyr His Leu
                                185
                                                    190
Thr Glu Glu Val Gly Phe Ala Val Ser Ser Cys Ile Val Met Ser Ser
                            200
Phe Val Leu Thr Val Val Ser Tyr Ile Gly Ile Val Ala Thr Val Leu
                        215
                                            220
Arg Ile Pro Ser Val Glu Gly
<210> 2263
<211> 306
<212> PRT
<213> Mus musculus
<400> 2263
Met Glu Ser Gly Asn Arg Ser Cys Gly Thr Asp Phe Thr Leu Val Gly
                                    10
Leu Phe Gln Asp Gly His Met Asp Thr Phe Leu Phe Thr Val Ile Ser
            20
Ile Leu Phe Ala Val Ala Leu Ile Gly Asn Ile Thr Leu Val Ile Leu
                            40
Ile Arq Leu Asp Gln Arq Leu His Thr Pro Met Tyr Phe Leu Leu Ser
                        55
                                            60
Gln Leu Ser Ile Met Asp Met Met Tyr Ile Ser Thr Thr Val Pro Lys
                    70
                                        75
                                                             80
Met Ala Ala Asn Phe Leu Ser Asp Thr Lys Ala Ile Ser Phe Leu Gly
                                    90
                85
Cys Val Ile Gln Thr Phe Val Phe Leu Thr Leu Gly Gly Ser Glu Ala
```

105 Leu Leu Gly Phe Met Ser Tyr Asp Arg Tyr Ile Ala Ile Cys Arg

```
120
       115
Pro Leu His Tyr Pro Val Phe Met Ser Arg Lys Ile Cys Cys Ser Met
                                       140
Val Ala Gly Ala Trp Ser Ser Ser Ile Thr Ala Ser Val His Thr
                  150
                                    155
Val Tyr Val Phe Gln Leu Pro Phe Cys Gly Ser Arg Met Val Asn His
              165
                                170
Phe Phe Cys Glu Val Pro Ser Leu Leu Pro Leu Val Cys Glu Asp Thr
                             185
Ser Gln Tyr Glu His Thr Val Leu Val Ser Gly Leu Val Ile Leu Met
       195
                         200
Leu Pro Phe Leu Ala Ile Leu Ala Ser Tyr Ala Arg Ile Leu Val Val
                     215
                                       220
Val Leu Gln Met Gly Ser Gly Gln Gly Gln Ser Arg Ala Val Ser Thr
                  230
                                    235
Cys Ser Ser His Leu Thr Val Ala Ser Leu Phe Tyr Val Thr Thr Leu
              245
                                250
Ser Thr Tyr Thr Gln Pro His Thr Leu His Ser Pro Gly Arg Asp Lys
           260
                             265
Val Val Ala Val Leu Tyr Ser Ile Val Thr Pro Val Leu Asn Pro Phe
                         280
                                           285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Met Gly Ala Leu Arg Arg Gln
                     295
Met Lys
305
<210> 2264
<211> 306
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (132)...(270)
<223> Any amino acid
<400> 2264
Met Asp Pro Ser Asn Tyr Ser Thr Leu His Val Phe Ile Leu Leu Gly
                                10
Phe Ser Asp His Pro His Leu Glu Met Ile Leu Ser Gly Val Val Thr
                             25
Phe Phe Tyr Ile Ile Thr Leu Val Gly Asn Thr Ala Ile Ile Leu Ala
                         40
                                           4.5
Ser Leu Leu Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Arg
                     55
                                       60
Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Ile Val Pro Gln
                                    75
Met Leu Val Asn Leu Trp Gly Pro Glu Lys Thr Ile Ser Ser Val Gly
Cys Ile Val Gln Leu Tyr Val Tyr Met Trp Leu Gly Ser Ile Glu Cys
                            105
Leu Leu Leu Ala Val Met Ser Tyr Asp Arg Phe Thr Ala Ile Cys Lys
                         120
                                           125
140
155
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165
                              170
185
                                           190
200
      195
                                        205
215
230
                                 235
245
                              250
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Phe Xaa Xaa Xaa Xaa Thr Pro
          260
                           265
Ser Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Arg Asp Met Lys Asp
                       280
Ala Leu Lys Lys Leu Met Arg Phe Tyr His Arg Phe Ala Glu Val Arg
                                     300
Arg Asn
305
<210> 2265
<211> 311
<212> PRT
<213> Mus musculus
<400> 2265
Ser Ile Tyr Glu Asn Gln Ser Ser Thr Val Thr Phe Ile Leu Val Gly
                              10
1
Phe Ser Glu Tyr Pro Asp Ile Gln Leu Pro Leu Phe Leu Leu Phe Leu
          20
                           25
Thr Ile Tyr Thr Val Thr Ala Leu Gly Asn Leu Gly Met Ile Ala Ile
      35
                       40
Ile Arg Leu Ser Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                    55
                                    60
His Leu Ser Phe Val Asp Phe Cys Tyr Ser Thr Val Val Thr Pro Lys
                70
                                 75
Leu Leu Glu Asn Leu Ile Val Glu Asp Arg Lys Ile Ser Phe Thr Gly
                              90
             85
Cys Val Met Gln Phe Phe Phe Ala Cys Ile Phe Val Val Thr Glu Thr
          100
                          105
                                           110
Phe Met Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val Cys Asn
                       120
                                        125
Pro Leu Leu Tyr Thr Val Ala Met Ser Gln Lys Leu Cys Trp Ser Leu
                    135
                                    140
Val Ala Gly Ser Tyr Ser Trp Gly Ile Ile Cys Ser Phe Val Phe Ile
                150
                                 155
Arg Phe Met Leu Thr Leu Val Phe Cys Gly Thr Lys Phe Ile Asn Asn
             165
                              170
                                               175
Phe Val Cys Glu His Asp Ala Ile Val Ala Val Ser Cys Ser Asp Pro
          180
                           185
                                           190
Tyr Ile Ser Gln Lys Val Ile Phe Ile Phe Ala Thr Phe Asn Glu Leu
      195
                       200
Ser Ser Leu Met Ile Ile Leu Thr Ser Tyr Val Phe Ile Val Ile Thr
                    215
                                    220
Val Met Lys Met Pro Thr Thr Gly Gly Arg Tyr Lys Val Phe Ser Thr
                                 235
                230
Cys Ala Ser His Leu Thr Thr Ile Thr Ile Phe His Ser Ile Ile Ile
                              250
```

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Cys Leu Tyr Cys Val Pro Thr Thr Lys Ser Ser Trp Leu Leu Val Lys
            260
                                265
Val Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Val Lys Lys Leu
                        295
                                             300
Met Cys Ser Ser Leu Ser Ser
<210> 2266
<211> 271
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (87)...(92)
<223> Any amino acid
<400> 2266
Met Glu Cys Gln Arg Asn Ile Ser Glu Phe Leu Leu Met Gly Leu Ser
                                    10
Ser Lys Gln Asn Thr Glu Val Phe Cys Phe Met Phe Phe Leu Phe Cys
                                25
Tyr Phe Thr Ile Leu Ser Trp Asn Leu Leu Ile Leu Phe Ser Ile Arg
                            40
Gly Ser Ser Leu Phe Asn Gln Pro Met Tyr Tyr Phe Leu Ser His Leu
Ala Ser Met Asp Ile Cys Tyr Thr Ser Cys Val Thr Pro Lys Leu Ile
Gly Gly Ser Ala Cys Arg Xaa Xaa Xaa Xaa Xaa Pro Leu His Tyr
                                    90
Met Val Ile Met Ser Arg Asn Arg Cys His Val Phe Ile Trp Ala Ser
                                105
                                                     110
Trp Val Gly Gly Val Ala His Ser Phe Pro Gln Val Met Met Leu Val
        115
                            120
Cys Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp His Tyr Phe Cys Asp
                        135
Val Phe Pro Leu Leu Lys Ile Ala Cys Thr Asp Thr Tyr Ile Ile Gly
                    150
                                         155
Val Leu Met Val Ala Asn Ser Gly Met Val Ala Ser Val Ile Phe Val
                                    170
                165
Leu Leu Phe Gly Ser Tyr Val Val Ile Leu Phe Thr Leu Arg Asn Tyr
                                185
                                                     190
Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser His Ile
        195
                            200
Ser Val Val Ile Leu Phe Phe Gly Ser Thr Ile Phe Ala Tyr Leu Arg
                        215
Pro Pro Thr Thr Phe Pro Glu Asp Lys Ile Phe Ala Leu Phe Tyr Thr
                    230
                                         235
Ile Ile Ala Pro Met Phe Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys
                245
                                    250
Glu Met Lys Thr Ala Ile Lys Lys Val Trp Cys Gln Met Ser Phe
            260
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<220>
<221> VARIANT
<222> (58)...(138)
<223> Any amino acid
<400> 2267
Met Glu Cys Lys Arg Asn Val Ser Glu Phe Leu Leu Met Gly Leu Ser
Ser Lys Gln Asn Thr Glu Val Phe Cys Phe Ile Phe Phe Leu Phe Cys
          20
                           25
Tyr Phe Thr Ile Leu Ser Trp Asn Leu Leu Ile Leu Phe Ser Ile Arg
                       40
Cys Ser Ser Leu Phe Asn Gln Pro Met Xaa Xaa Xaa Xaa Xaa Xaa Xaa
                    55
70
                                  75
90
105
120
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Phe Ile Trp Ala Ser Trp
                    135
                                     140
Val Gly Gly Val Ala His Ser Phe Pro Gln Val Met Met Leu Val Cys
                150
Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp His Tyr Tyr Cys Asp Val
                              170
                                               175
Phe Pro Leu Leu Lys Val Ala Cys Thr Asp Thr Tyr Ile Ile Gly Val
                           185
Leu Met Val Ala Asn Ser Gly Met Val Ala Phe Val Ile Phe Val Leu
                        200
Leu Phe Gly Ser Tyr Val Val Ile Leu Phe Thr Leu Arg Asn Tyr Ser
                                     220
Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser His Ile Ser
                230
                                  235
Val Val Ile Leu Phe Phe Gly Pro Ser Ile Phe Val Tyr Leu Arg Pro
             245
                              250
Pro Thr Thr Phe Pro Glu Asp Lys Ile Phe Ala Leu Phe Tyr Thr Ile
          260
                           265
Ile Ala Pro Met Phe Asn Pro Leu Ile Tyr Thr Leu Arg Asn Thr Glu
                       280
                                        285
Met Lys Ser Ala Ile Lys Lys Val Trp Cys Gln Val Thr Phe Leu Gly
   290
                    295
                                     300
Glu Lys His Asn
305
<210> 2268
<211> 118
<212> PRT
<213> Mus musculus
<400> 2268
Gly Ile Val Val Thr Ala Asn Ser Gly Thr Ile Ala Leu Gly Ser Phe
              5
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<212> PRT

<213> Mus musculus

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Val Ile Leu Leu Ile Ser Tyr Thr Val Ile Leu Met Ser Leu Arg Lys
Gln Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser His
                            40
Ile Ala Val Val Ile Ile Phe Phe Gly Pro Cys Thr Phe Met Tyr Met
Arg Pro Asp Thr Thr Phe Ser Glu Asp Lys Met Val Ala Ile Phe Tyr
Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn
                                    90
Ala Glu Val Lys Asn Ala Met Arg Lys Leu Trp Ala Arg Lys Phe Ser
            100
                                105
Trp Glu Thr Thr Gly Lys
        115
<210> 2269
<211> 122
<212> PRT
<213> Mus musculus
<400> 2269
Met His Asn Asn Ser Met Thr Glu Phe Ile Leu Leu Gly Leu Thr Gln
Asp Pro Glu Gln Gln Lys Ala Ile Phe Gly Val Phe Leu Ile Leu Tyr
Leu Met Thr Leu Ile Gly Asn Phe Leu Ile Met Val Thr Ile Lys Met
Ser Gln Thr Leu Gly Ser Pro Met Tyr Val Phe Leu Phe Tyr Leu Ser
Phe Ala Asp Ala Cys Phe Ser Thr Thr Thr Ala Pro Arg Leu Ile Val
Asn Ala Leu Ser Gln Lys Lys Ile Ile Ser Tyr Asn Glu Cys Met Thr
Gln Val Phe Ala Ala His Phe Phe Gly Cys Met Glu Ile Phe Val Leu
                                105
Ile Leu Met Ala Ile Asp Arg Tyr Val Ala
        115
<210> 2270
<211> 309
<212> PRT
<213> Mus musculus
<400> 2270
Met Glu Pro Tyr Asn Leu Thr Gly Thr Leu Glu Phe Ile Leu Leu Gly
Leu Ser Glu Asp Pro Glu Leu Gln Leu Ile Leu Phe Ala Leu Phe Met
            20
Leu Ile Tyr Leu Leu Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
                            40
Ile Ser Cys Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Tyr
                                            60
```

Asn Leu Ser Leu Ser Asp Met Gly Phe Ser Ser Thr Thr Ile Pro Lys

Met Leu Ile Asn Leu His Val His Asn Arg Ser Ile Thr Tyr Ala Glu

Cys Leu Thr Arg Val Tyr Phe Phe Phe Leu Phe Gly Gly Met Asp Ser

75

80

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100
                                 105
                                                     110
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Trp Val Ala Ile Cys Arg
                            120
                                                125
Pro Leu His Tyr Gln Val Ile Leu Ser Pro Arg Leu Cys Arg Cys Leu
                                             140
                        135
Val Ile Val Ser Leu Ser Ile Ser Leu Val Ser Ser Gln Val His Cys
                    150
                                         155
Leu Leu Val Ser Gln Leu Thr Phe Cys Ile Asn Val Glu Ile Pro His
                165
                                     170
Phe Phe Cys Asp Val Pro Glu Leu Val Lys Leu Ala Cys Ser Asn Thr
                                                     190
            180
                                 185
Thr Ile Asn Asp Ile Val Met Phe Leu Leu Ser Ile Ile Val Gly Phe
        195
                            200
Leu Pro Ala Ser Gly Ile Phe Tyr Ser Tyr Tyr Lys Ile Thr Ser Ser
                                             220
                        215
Ile Phe Arg Val Pro Ser Leu Leu Ala Lys Tyr Lys Ala Phe Ser Thr
                    230
                                         235
Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr Gly Ile
                                     250
                                                         255
                245
Gly Val Tyr Leu Ser Ser Thr Val Ser Ser Ser Arg Glu Ser Met
Val Ala Ser Val Met Tyr Thr Met Val Val Pro Met Met Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Lys Ser Leu Trp Lys Ile
    290
                        295
                                             300
Val His Gln Ile Thr
305
<210> 2271
<211> 515
<212> PRT
<213> Mus musculus
<220>
<221> CONFLICT
<222> (197)...(204)
<223> Any amino acid
<400> 2271
Met Asn Asp Thr Phe Ile Val Thr Met Phe Ala Tyr Phe Gln Val Lys
Thr Ala Asn Phe Met Glu Gln Glu Asn Ile Thr Ala Thr Ser Ile Phe
Ile Leu Leu Gly Leu Ser Lys Glu Thr Asp Ile Gln Pro Leu Val Phe
                            40
Gly Leu Phe Leu Phe Ile Tyr Leu Val Cys Ile Thr Gly Asn Met Leu
                        55
                                             60
Ile Ile Leu Ile Ile Thr Ser Asp Ala His Leu Gln Thr Pro Met Tyr
                    70
                                         75
                                                             80
Phe Phe Leu Ser Asn Leu Ser Phe Thr Asp Ile Cys Phe Ile Ser Thr
                                    90
                                                         95
Thr Val Pro Lys Met Leu Val Asn Ile Gln Thr Gln Asn Lys Ser Ile
            100
                                 105
                                                     110
Thr Tyr Glu Gly Cys Leu Ala Gln Met Tyr Phe Phe Met Phe Phe Ser
        115
                            120
                                                 125
Gly Leu Asp Ser Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Phe Val
                        135
                                            140
Ala Ile Cys His Pro Leu His Tyr Met Ile Val Met Ser Pro His Leu
```

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Cys Val Ser Leu Leu Leu Ser Cys Leu Ile Cys Leu Ala Tyr Ser
                165
                                    170
                                                         175
Leu Leu Gln Thr Leu Phe Phe Phe Ser Ile Phe Tyr Val Phe Asn Ser
            180
                                185
Phe Thr Phe Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala Tyr Lys Val
                            200
Cys Lys Ser Asn Gly Pro Leu Phe Pro Val Met Ala Asp Ala Ile Phe
                        215
Tyr Ile Cys Ser Ser Gln Glu Leu Arg Gly Thr Gly Leu Ile Met Leu
                    230
                                         235
Phe His Leu Gly Cys Arg Ser Leu Leu Leu Gly Tyr Phe Leu Leu Leu
                245
                                    250
His Trp Glu Pro Tyr Asp Pro Ser Ile Ser Leu Ala Ser Thr Ser Val
                                265
                                                     270
Phe Ala Gly Pro Arg His Ser Leu Thr Arg Asp Ser Tyr Ile Cys Val
                            280
Leu Ser Ile Lys Ser Cys Cys Met Gln Trp Cys Gln Arg Leu Asp Ala
                        295
Asp Tyr Gly Val Asp Pro Trp Leu Trp Gln Ser Leu His Gly Pro Ser
                    310
                                         315
Phe His Leu Ser Ser Lys Leu Arg Leu Cys Asn Ser Phe His Gly Cys
                                    330
Phe Val Pro Lys Ser Lys Glu Gly His Ser Val His Thr Ser Val Phe
            340
                                345
Ile Leu Leu Glu Phe His Val Leu Gln Thr Leu Met Phe Leu Arg Val
        355
                            360
Ser Phe Cys Lys Lys Thr Glu Ile Pro His Tyr Phe Cys Glu Leu Ala
                        375
Gln Ile Leu Lys Leu Ala Cys Ser Asp Thr Tyr Ala Asn Asp Ile Leu
                    390
                                         395
Leu Tyr Cys Val Thr Gly Leu Leu Gly Ile Ile Pro Leu Ser Gly Ile
                                    410
                                                         415
Leu Phe Ser Tyr Ser Lys Ile Ile Asn Ser Ile Val Gly Ile Ser Ser
                                425
Ala Arg Gly Lys Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser
        435
                            440
Val Val Ser Leu Phe Tyr Gly Thr Gly Leu Gly Val Tyr Leu Thr Ser
                        455
Gln Met Ser Tyr Lys Ser Arg Glu Gly Ser Ile Ala Ser Val Met Tyr
                    470
                                         475
Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn
                                    490
Lys Asp Leu Asn Gln Ala Leu Arg Arg Phe Phe His Ser Thr Gly Asp
                                505
Arg Phe Arg
        515
<210> 2272
<211> 109
<212> PRT
<213> Mus musculus
<400> 2272
Met Glu Pro Tyr Asn Leu Thr Gly Thr Leu Glu Phe Ile Leu Leu Gly
                5
                                    10
Leu Ser Glu Asp Pro Glu Leu Gln Leu Ile Leu Phe Ala Leu Phe Leu
            20
```

145

150

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Leu Ile Tyr Leu Leu Thr Met Leu Gly Asn Val Leu Ile Ile Leu Ala
Ile Ser Cys Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Tyr
Asn Leu Ser Leu Ser Asp Met Gly Phe Ser Ser Thr Thr Ile Pro Lys
                    70
Met Leu Ile Asn Leu His Ala His Lys Arg Ser Thr Thr Tyr Ala Glu
Cys Leu Thr Gln Val Ser Phe Phe Ile Leu Phe Gly Cys
            100
```

<210> 2273 <211> 310 <212> PRT <213> Mus musculus <400> 2273 35

Val Ser Ser Thr Asn Gln Tyr Ser Val Ser Glu Phe Ile Leu Leu Glu Leu Ser Arg Gln Pro Gln Gln Gln Leu Leu Phe Leu Phe Leu Ile Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala Ile Ser Thr Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe Val Asp Val Cys Phe Ser Ser Thr Ile Val Pro Lys 70 Val Leu Ala Ile His Ile Leu Arg Asn Gln Ala Ile Leu Tyr Ser Gly Cys Leu Thr Gln Leu Tyr Phe Leu Cys Val Phe Ala Asp Val Asp Asn 105 Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His 120 Pro Leu His Tyr Thr Thr Lys Met Thr His Gln Leu Cys Ala Leu Leu 135 140 Val Val Gly Ser Gly Val Val Ala Asn Leu Asn Cys Leu Leu His Thr 150 Leu Leu Met Ala Leu Ser Phe Cys Glu Asn Tyr Ile Ile Pro His Phe 170 Phe Cys Asp Ala Thr Pro Leu Leu Lys Ile Phe Cys Ser Asp Pro His 185 190 Leu Asn Asp Leu Met Ile His Thr Glu Gly Thr Met Ile Ile Val Thr 200 Pro Phe Val Cys Ile Leu Ile Ser Tyr Ile His Ile Thr Tyr Ala Ile Leu Arg Val Ser Ser His Arg Gly Gly Trp Lys Ala Phe Ser Thr Cys 230 235 Gly Ser His Leu Ala Val Val Cys Phe Phe Tyr Gly Thr Ile Ile Thr 250 Glu Tyr Phe Asn Pro Ser Ser Ser His Ser Ala Arg Arg Asp Met Thr 265 270 Ala Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile 280 Tyr Ser Leu Gly Ser Arg Val Met Lys Arg Gly Phe Lys Lys Ser Ala 300

295 Tyr His Glu Ile Tyr Ile 305 310

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<211> 309
<212> PRT
<213> Mus musculus
<400> 2274
Met Ala Pro Val Asn Gln Ser Val Val Thr Met Phe Ile Leu Gln Arg
1
Phe Val Asp Asp Pro Arg Val Gln Asp Val Leu Phe Cys Leu Phe Phe
                                 25
Ala Leu Phe Val Ala Ala Ile Ala Gly Asn Gly Leu Ile Ile Ala Thr
Ile His Ser Ser Pro Asn Leu His Thr Pro Met Tyr Phe Phe Leu Val
                        55
Asn Leu Ala Leu Met Asp Val Ile Cys Thr Val Thr Val Leu Pro Lys
                    70
                                         75
Val Leu Gln Ser Leu Val Ala Glu Asn Ser Ile Ser Tyr Gly Gly Cys
                                     90
Leu Thr Gln Met Phe Val Phe Ser Trp Val Leu Gly Ser Glu Leu Leu
            100
                                 105
                                                     110
Leu Phe Ser Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg Pro
        115
                            120
                                                 125
Leu His Tyr Gly Thr Leu Met Ser Gly Arg Val Cys Val Ala Leu Ala
                        135
                                            140
Thr Phe Val Trp Phe Thr Gly Ala Phe Asn Ser Leu Val Leu Thr Cys
                    150
                                         155
                                                             160
Leu Met Leu Pro Leu Ser Phe Cys Gly Pro Asn Leu Ile Thr His Phe
                165
                                     170
                                                         175
Phe Cys Glu Ile Pro Ser Val Leu Ile Leu Ser Cys Ser Pro Thr Phe
            180
                                185
                                                     190
Ile Asn Asp Ile Met Thr Val Ile Ala Asp Met Phe Leu Thr Gly Leu
        195
                            200
                                                 205
Asn Phe Leu Leu Thr Met Thr Ser Tyr Gly Phe Ile Ile Ser Ser Ile
                        215
                                             220
Leu Arg Ile Arg Ser Ala Glu Gly Lys Lys Arg Ala Phe Ser Thr Cys
                    230
                                         235
                                                             240
Ser Ala His Leu Val Val Thr Leu Tyr Tyr Ser Thr Val Leu Tyr
                                     250
                245
Thr Tyr Val Arg Pro Ala Leu Gly Thr Ala Gly Phe Leu Asp Lys Leu
                                265
                                                     270
Ile Ala Val Leu Tyr Thr Thr Val Thr Pro Ser Leu Asn Pro Leu Ile
                            280
                                                 285
Tyr Thr Leu Arg Asn Lys Glu Phe Lys Thr Ser Phe Lys Lys Leu Ile
Ser Leu Leu Arg Thr
305
<210> 2275
<211> 188
<212> PRT
<213> Mus musculus
<400> 2275
Pro Phe Arg Tyr Pro Val Ile Met Ser Pro Gly Leu Ala Ala Phe Leu
                5
                                    10
Ala Gly Gly Ser Trp Leu Ser Gly Phe Thr Ile Ser Leu Gly Lys Val
            20
                                25
                                                     30
```

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Phe Phe Ile Ser Arg Leu Gly Tyr Cys Gly Pro Asn Val Met Asn His
Phe Phe Cys Asp Val Ser Pro Leu Leu Asn Leu Ala Cys Ser Asp Met
Ser Val Ala Glu Leu Val Asp Phe Leu Leu Ala Leu Leu Ile Leu Leu
Gly Pro Leu Leu Thr Val Phe Ser Tyr Thr Ala Ile Leu Ser Thr
                                    90
Val Leu Arg Met Pro Ser Ala Gly Gly Arg Gln Lys Ala Phe Ser Thr
           100
                                105
Cys Ala Ser His Leu Ala Val Val Val Ile Phe Tyr Ser Ala Ser Leu
       115
                            120
Phe Ile Tyr Ala Arg Pro Arg Ala Leu Tyr Ser Phe Asp Tyr Asn Lys
                        135
Leu Val Ser Val Val Tyr Thr Val Leu Thr Pro Leu Ile Asn Pro Ile
                    150
                                        155
Ile Tyr Cys Leu Arg Asn Gln Glu Val Lys Gln Ala Leu His Lys Val
               165
                                    170
Gln Gln Arg Ala Ala Gln Val Leu Gly Ala Ser Ser
                                185
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<210> 2276 <211> 313 <212> PRT

<213> Mus musculus

<400> 2276

Met Ala Phe Gln Ala Asp Gly Asn His Thr Thr Val Thr Glu Phe Leu Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Val Ile Leu Phe Thr 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Ser Val Asp Ile Gly Ile Ser Ser Val Thr Pro Asn Met Leu Val Asn Phe Leu Val Glu Arg Asn Thr Ile Ser Tyr Leu Gly Trp Gly Ile Gln Leu Ser Phe Gly Asp Ile Phe Gly Ser 105 Val Glu Cys Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Met Ala 120 125 Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys 140 Val Gln Leu Val Val Gly Ser Tyr Ile Gly Gly Leu Leu Asn Ala Ser 150 155 Phe Ala Met Val Ser Phe Phe Ser Phe Leu Phe Cys Gly Ser Asn Arg 170 Val Glu His Phe Phe Cys Asp Phe Val Pro Leu Ala Glu Leu Ser Cys 185 Ser Asp Ile Ser Ile Ser Val Val Leu Val Ser Phe Ser Ala Gly Ser 200 Val Thr Met Leu Thr Val Phe Ile Ile Val Ile Ser Tyr Ser Tyr Ile 215 220 Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala 230 235 Phe Ser Thr Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Thr

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245
                                    250
Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Phe Ser Thr Asn Gln
            260
                                265
Asn Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu Asn
        275
                            280
Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Asp Ala Leu Arg
                        295
                                            300
Arg His Leu Gly Lys Lys Thr Leu Ser
                    310
<210> 2277
<211> 307
<212> PRT
<213> Mus musculus
<400> 2277
Leu Ala Phe Leu Glu Asp Gly Asn His Thr Ile Val Thr Glu Phe Thr
                                    10
Leu Leu Asp Leu Thr Glu Asp Leu Val Leu Arg Val Ile Leu Phe Ser
Ile Ile Leu Cys Ile Tyr Leu Val Ser Val Ser Gly Asn Leu Ser Thr
                            40
Ile Leu Leu Ile Thr Arg Leu Tyr His Thr Met Tyr Phe Phe Leu Ser
                        55
                                            60
His Leu Ala Ser Val Asp Met Gly Leu Ser Ser Ser Val Thr Pro Asn
                    70
                                        75
Met Phe Val Asn Phe Leu Thr Glu Arg His Thr Ile Ser Tyr Phe Gly
                85
                                    90
Cys Gly Ile Gln Leu Ser Ser Ala Ala Phe Phe Gly Ala Val Glu Phe
                                105
                                                     110
Phe Leu Leu Ala Val Met Thr Tyr Asp Cys Leu Ile Ala Ile Asn Pro
                            120
                                                125
Leu Leu Tyr Ser Thr Lys Leu Ser Thr Gln Val Cys Ile Leu Val Val
                        135
                                            140
Gly Ser Tyr Val Gly Gly Phe Leu Asn Ala Ser Phe Val Thr His Phe
                    150
                                        155
Phe Leu Ser Phe Leu Phe Tyr Gly Pro Asn Arg Val Asn His Phe Phe
                165
                                    170
Cys Asp Phe His Pro Met Met Glu Leu Ser Cys Ser Asp Val Ser Val
            180
                                185
                                                    190
Ser Gly Ile Val Ile Ser Phe Thr Ala Gly Leu Ile Ser Met Thr Thr
        195
                            200
                                                205
Leu Ile Val Ile Val Ile Ser Tyr Phe Tyr Ser Leu Ile Thr Ile Leu
    210
                        215
                                            220
Lys Met Gln Ser Thr Glu Gly His Gln Lys Thr Phe Ser Thr Cys Ala
225
                    230
                                        235
Ala His Leu Thr Ala Val Ile Leu Ser Tyr Gly Thr Ala Thr Phe Phe
                                    250
                245
Tyr Val Met Pro Lys Ser Thr Tyr Ser Glu Asp Gln Asn Lys Val Val
                                265
                                                    270
            260
Ser Phe Tyr Thr Val Ala Ile Pro Val Trp Asn Pro Leu Ile Tyr Ser
       275
                            280
                                                285
Pro Trp Asn Thr Glu Thr Lys Asn Ala Leu Lys Gln Phe Tyr Arg Lys
   290
                                            300
                        295
Thr Leu Leu
305
```

```
<211> 311
<212> PRT
<213> Mus musculus
<400> 2278
Met Val Asn Gln Ser Ser Pro Val Val Phe Phe Leu Leu Gly Phe Phe
                                    10
Glu His Pro Gln Leu Glu Lys Val Leu Phe Val Val Val Leu Cys Ser
           20
                                25
Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu Ile Leu Leu Ser Thr
                            40
Leu Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu
                        55
Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr Cys Val Pro Gln Met Leu
                   70
                                        75
Phe Asn Leu Trp Gly Pro Glu Lys Thr Ile Ser Phe Leu Gly Cys Phe
               85
                                    90
                                                        95
Val Leu Phe Ile Phe Met Ser Leu Gly Thr Thr Glu Cys Ile Leu Leu
           100
                                105
                                                   110
Thr Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu His
                           120
                                               125
       115
Tyr Ala Thr Val Ile Asn Pro Arg Leu Cys Gln Gln Leu Ala Gly Ile
                       135
                                           140
Ala Trp Ala Ile Gly Leu Val Gln Ser Ile Val Gln Thr Pro Pro Thr
                   150
                                        155
Leu Lys Leu Pro Phe Cys Ser His Arg Gln Ile Asp Asn Phe Val Cys
               165
                                    170
                                                        175
Glu Val Pro Ser Leu Ile Gln Leu Ser Cys Gly Asp Ile Thr Tyr Asn
           180
                                185
                                                   190
Glu Ile Gln Met Ala Val Ala Ser Ile Phe Ile Val Val Val Pro Leu
       195
                            200
                                                205
Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Ala Arg Ala Val Leu Lys
                       215
                                            220
Ile Ser Ser Ala Lys Gly Arg Arg Lys Ala Phe Gly Thr Cys Ser Ser
                   230
                                       235
His Leu Ile Val Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val Tyr
               245
                                    250
Leu Gln Pro Lys Asn Pro Tyr Ala Arg Glu Arg Gly Lys Phe Phe Gly
           260
                                265
                                                    270
Leu Phe Tyr Ala Val Gly Thr Pro Thr Leu Asn Pro Leu Val Tyr Thr
                           280
                                               285
Leu Arg Asn Lys Glu Val Lys Arg Ala Phe Trp Lys Leu Leu Arg Lys
                       295
Asp Glu Asp Ser Glu Glu Ser
<210> 2279
<211> 274
<212> PRT
<213> Mus musculus
<400> 2279
Gly Thr His Phe Ile Leu Leu Ser Thr Leu Asp Pro Arg Leu His
                5
                                    10
Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe Leu Asp Leu Cys
           20
                                25
Phe Thr Thr Cys Val Pro Gln Met Leu Phe Asn Leu Trp Gly Pro
```

```
40
Thr Lys Thr Ile Ser Phe Leu Gly Cys Ser Val Gln Leu Phe Ile Phe
Met Leu Leu Gly Thr Thr Glu Cys Ile Leu Leu Thr Val Met Ala Phe
Asp Arg Tyr Val Ala Val Cys Gln Pro Leu His Tyr Ala Thr Ile Ile
His Pro Arg Leu Cys Arg Gln Leu Ala Gly Val Ala Trp Ala Ile Gly
                                105
            100
Leu Ile Gln Ser Ile Val Gln Ile Pro Pro Thr Leu Thr Leu Pro Phe
        115
                            120
                                                125
Cys Ser His Arg Gln Ile Asp Asp Phe Leu Cys Glu Val Pro Ser Leu
                        135
                                            140
Ile Arg Leu Ser Cys Gly Asp Thr Thr Phe Asn Glu Ile Gln Leu Ser
                    150
                                        155
Val Ala Gly Val Ile Phe Leu Leu Val Pro Leu Ser Leu Ile Ile Val
                165
                                    170
Ser Tyr Gly Val Ile Ala Arg Ala Val Leu Lys Thr Asn Ser Ser Lys
            180
                                185
                                                     190
Gly Arg Arg Lys Ala Phe Gly Thr Cys Ser Ser His Leu Ile Val Val
        195
                            200
                                                 205
Thr Leu Phe Tyr Ser Ser Val Ile Ala Val Tyr Leu Gln Pro Lys Asn
                        215
                                            220
Pro Tyr Ala Gln Glu Arg Ser Lys Phe Phe Gly Leu Phe Tyr Ala Val
                    230
                                        235
Gly Thr Pro Thr Leu Asn Pro Leu Val Tyr Thr Leu Arg Asn Lys Glu
                                    250
                245
Val Lys Arg Ala Phe Trp Arg Leu Leu Gly Lys Asp Ala Ala Ser Gly
Gly Asn
```

<211> 260

<212> PRT

<213> Mus musculus

<400> 2280

Thr Ile Trp Ile Leu Pro Phe Arg Pro Leu Ser Phe Phe Leu Phe Tyr 10 Leu Val Phe Gln Asp Lys Ser Gly Cys Arg Lys Ala Val Glu Lys Glu 25 Thr His Lys Val Ala Lys Ser Leu Ala Thr Leu Ala Gly Cys Leu Leu 35 40 Gln Phe Leu Thr Phe Thr Ser Leu Asp Ala Asp Glu Tyr Phe Leu Leu 55 Thr Leu Met Ala His Asp His Cys Leu Ala Ile Phe Tyr Ser Leu Tyr 70 Pro Arg Leu Met Arg Pro Gln Trp Cys Leu Gly Leu Val Ile Ile Val Trp Leu Ser Gly Phe Met Glu Ala Gly Leu Val Val Ala Leu Thr Ala 100 105 Gln Leu Arg Phe Cys Gly Pro Asn Leu Ile Asp His Phe Tyr Cys Asp 120 Phe Ser Pro Leu Met Ile Leu Ala Cys Ser Asp Thr Val Ala Gln Met 135 140 Thr Thr Phe Val Leu Phe Val Val Phe Leu Pro Val Leu Ser Gly Leu

Ile Leu Met Ser Tyr Ala Gln Phe Val Val Ile Val Leu Arg Ile Pro 170 Ser Gly Ala Arg Arg Thr Lys Ala Phe Phe Thr Cys Ser Ser His Leu 185 Ala Met Met Phe Thr Phe Tyr Gly Ser Leu Met Val Trp Tyr Thr Ala 200 Pro Ser Ala Val Leu Ser Leu Gln Leu Leu Ser Lys Val Ile Ala Leu 220 215 Leu Tyr Thr Val Phe Ala Pro Ile Phe Asn Ser Val Ile Tyr Thr Leu 235 230 Arg Asn Leu Asp Met Gln Lys Ala Leu Arg Arg Leu Leu Tyr Cys Lys 250 Ser Thr Glu Met 260 <210> 2281 <211> 251 <212> PRT <213> Mus musculus <400> 2281 Asp Thr Pro Leu His Pro Pro Pro Ser Phe Phe Leu Ser Tyr Leu Val Leu Gln Gly Trp Lys Ala Glu Tyr Arg Lys Ala Val Glu Lys Gly Thr 25 His Lys Val Ala Lys Ser Leu Val Thr Leu Pro Gly Cys Leu Leu Gln Phe Phe Thr Phe Ser Ser Leu Tyr Ile Asp Glu Tyr Phe Leu Leu Ala 55 Leu Met Ala Tyr Asp His Cys Leu Ala Ile Cys Tyr Ser Leu Tyr Pro 75 70 Arg Leu Met Arg Pro Gln Trp Cys Leu Gly Leu Val Leu Thr Val Trp 85 90

Val Ser Gly Phe Met Glu Asp Gly Leu Val Val Ala Leu Thr Ala Gln 100 105 Leu Arg Phe Cys Gly Pro Asn Leu Ile Asp His Phe Tyr Cys Asp Phe 125 120 Ser Pro Leu Met Ala Cys Phe Asp Thr Val Ala Gln Met Thr Thr Phe 135 140 Val Leu Ser Val Ile Phe Leu Thr Val Pro Phe Gly Leu Val Leu Ile 150 155 Ser Tyr Ala Gln Ile Val Val Thr Val Leu Arg Ile Leu Ser Gly Ala 170 165 Arg Arg Thr Lys Ala Phe Phe Ile Cys Pro Ser His Leu Ala Val Val 180 185 190 Ser Thr Leu Tyr Gly Thr Leu Met Gly Leu Tyr Thr Val Pro Phe Val 195 200 Val His Ser Gln Leu Leu Thr Lys Val Ile Ala Leu Leu Tyr Thr Val 215 Phe Thr Pro Val Phe Asn Pro Val Ile Tyr Thr Leu Lys Asn Gln Glu 230 235 Val Gln Gln Ala Leu Arg Arg Leu Leu Tyr Cys 245

<210> 2282 <211> 301

<212> PRT

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<400> 2282
Ile Ile Gly Phe Pro Met Gln Gly Gln Pro Asn Tyr Ile Tyr Ile
                                    10
His Lys Gln Gln Lys Trp Thr Gln Gln Ile Val Tyr Ile Tyr Val Cys
            20
                                25
Val Cys Val Cys Val Cys Val Cys Val Ala Tyr Val His Thr
                            40
                                                45
Tyr Thr Tyr Lys Tyr Ile Cys Val Tyr Lys Trp Leu Ser Ser Lys Ser
                        55
Ser Arg Asp Leu Glu Gly Gly Trp Lys Met Ser Val Glu Lys Arg Thr
                    70
                                        75
Gln Ser Arg Gln Lys Ser Gly Tyr Thr Gly Gln Leu Leu Pro Pro Val
                                    90
                85
Leu His Pro Trp Leu Cys Arg Lys Tyr Phe Leu Leu Ile Val Met Val
            100
                                105
                                                     110
Tyr Asp His Tyr Leu Thr Ile Cys His His Leu Tyr Pro Phe Leu Met
                            120
                                                125
        115
Gly Pro Leu Trp Gly Leu Gly Phe Gly Leu Thr Thr Ser Phe Val Val
                        135
                                            140
Asp Glu Leu Ile Val Ala Leu Met Ala Gln Leu Arg Phe Cys Val Pro
145
                    150
                                        155
Lys Gln Ile Asp His Phe Tyr Tyr Asp Phe Ser Pro Leu Val Val Leu
                165
                                    170
                                                         175
Ala Tyr Thr Asp Thr Gly Leu Val Gln Val Thr Thr Phe Val Leu Phe
            180
                                185
                                                     190
Val Val Phe Leu Thr Val Pro Phe Gly Leu Val Leu Ile Ser Cys Ala
        195
                            200
                                                205
Gln Ile Ala Val Thr Val Leu Arg Val Pro Ser Arg Thr Arg Arg Asn
                        215
                                            220
Lys Ala Phe Ser Thr Cys Ser Ser His Leu Asp Glu Val Ser Thr Phe
                    230
                                        235
Tyr Gly Ser Leu Met Val Trp Tyr Thr Glu Pro Ser Ala Val His Ser
                                    250
                245
Gln Ile Leu Ser Lys Val Ile Ala Leu Leu Tyr Thr Val Val Thr Thr
            260
                                265
Ile Phe Asp Pro Gly Ile Tyr Thr Leu Arg Asn Gln Glu Val Gln Gln
                            280
Ser Leu Arg Arg His Leu Tyr Cys Lys Pro Thr Glu Met
                        295
<210> 2283
<211> 293
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (68)...(111)
<223> Any amino acid
<400> 2283
Met Glu Asp Met Ala Ala Gly Asn His Cys Thr Val Thr Glu Phe Phe
                                    10
                                                        15
Leu Ala Gly Leu Ser Glu Lys Ser Glu Leu Gln Leu Pro Leu Phe Leu
```

Leu Phe Thr Gly Ile Tyr Leu Ile Thr Met Ala Gly Asn Leu Gly Met

```
40
Ile Thr Leu Ile Gly Leu Ser Ser His Leu His Thr Pro Met Tyr Tyr
                    55
70
100
                          105
                                           110
Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Tyr Ser Ser Leu Ile Ser
      115
                       120
                                        125
Gly Val Tyr Ile Phe Ala Val Ile Cys Ser Ser Phe Asn Thr Gly Phe
                    135
                                     140
Met Leu Arg Thr Gln Phe Cys Asn Leu Asp Val Ile Asn His Tyr Phe
                150
                                 155
Cys Asp Leu Leu Pro Leu Leu Asn Leu Ala Ser Ser Asn Thr Tyr Ile
             165
                              170
                                               175
Asn Glu Ile Leu Ile Leu Phe Phe Ala Thr Leu Asn Ser Phe Val Pro
          180
                           185
                                           190
Val Leu Thr Ile Ile Thr Ser Tyr Ile Phe Ile Ile Val Thr Ile Leu
      195
                       200
                                        205
Ser Ile His Ser Arg Glu Gly Lys Phe Lys Ala Phe Ser Thr Cys Ser
                    215
                                     220
Thr His Ile Ser Ala Val Ala Ile Phe Tyr Gly Ser Gly Ala Phe Thr
                230
                                 235
Tyr Leu Gln Pro Ser Ser Leu Asn Ser Met Gly Gln Ala Lys Val Ser
                              250
             245
Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu Asn Pro Leu Ile Tyr
          260
                          265
Ser Leu Arg Asn Lys Asp Val Ser Ile Ala Leu Lys Lys Ile Leu Glu
                       280
      275
Arg Lys Lys Phe Met
   290
```

<211> 178

<212> PRT

<213> Mus musculus

<400> 2284

Met Glu Asp Met Thr Ala Gly Asn His Cys Thr Val Thr Val Phe Phe Leu Ala Gly Leu Ser Glu Gln Ser Glu Leu Gln Leu Pro Leu Phe Leu Phe Phe Thr Gly Ile Tyr Leu Ile Thr Val Ser Gly Asn Leu Gly Met Ile Ile Leu Ile Gly Leu Ser Ser Asn Leu His Thr Pro Met Tyr Tyr Phe Leu Ser Ser Leu Ser Phe Ile Asp Phe Gly Gln Ser Thr Val Val Thr Pro Lys Met Leu Val Ser Phe Leu Thr Glu Lys Asn Phe Ile Thr Tyr Pro Gly Cys Met Thr Gln Leu Tyr Phe Val Ile Ile Phe Gly Thr Ala Glu Ser Tyr Thr Leu Ala Ala Met Ala Tyr Asp His Tyr Val Ala Ile Cys Asn Thr Leu Val Tyr Asn Ile Ala Met Ser Ser Gln Ile Tyr Cys Ser Leu Ile Ser Gly Val Tyr Ile Phe Ala Val Phe Cys Ala Ser 145 150 155 160 Val Asn Met Gly Phe Met Phe Arg Ile Gln Phe Cys Lys Ser Asp Val 165 170 175 Ile Asn

<210> 2285 <211> 178 <212> PRT <213> Mus musculus <400> 2285 Ser Tyr Gln Val Cys Leu Leu Met Val Ala Val Val Tyr Gly Ile Gly Leu Ile Ser Ala Thr Ala His Thr Val Phe Leu Leu Arg Leu Phe Phe Cys Lys Ala Asp Lys Ile Asn His Tyr Phe Cys Asp Leu Phe Pro Leu 40 Leu Glu Leu Ser Cys Ser Ser Thr Phe Ile Asn Glu Ile Leu Ala Leu Ser Phe Ser Ala Phe Asn Ile Ile Val Pro Ala Met Thr Ile Ile Gly Ser Tyr Ile Phe Ile Ile Ile Ser Ile Leu His Ile Lys Ser Ser Gly 85 90 Gly Arg Val Lys Ala Phe Arg Thr Cys Ser Ser His Ile Leu Ala Val 100 105 Ala Ile Phe Phe Gly Ser Thr Thr Phe Met Tyr Leu Gln Pro Ser Ser 115 120 Val Ser Ser Met Asp Gln Gly Lys Val Ser Ser Val Phe Tyr Thr Ile 135 140 Val Val Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Asp 150 155 Val Lys Val Ala Leu Lys Lys Leu Leu Gln Lys Met Phe Pro Gln Asn

170

<210> 2286 <211> 183 <212> PRT <213> Mus musculus

Lys Glu

```
100
                                105
Tyr Gly Ala Ala Val Tyr Thr Tyr Ile Phe Pro Ala Ser Leu His Thr
                            120
                                                125
Pro Glu Lys Asp Met Val Val Ser Val Phe Tyr Thr Ile Leu Thr Pro
                        135
                                            140
Leu Leu Asn Pro Leu Ile Tyr Ser Phe Arg Asn Lys Asn Val Thr Glu
                    150
                                        155
Ala Met Lys Lys Leu Leu Gly Val Lys Pro Phe Phe Gln Glu Ser Leu
                165
                                    170
Lys Glu Val Ile Tyr Lys Glu
            180
<210> 2287
<211> 306
<212> PRT
<213> Mus musculus
<400> 2287
Met Glu Thr Gly Asn Arg Ser Cys Gly Thr Asp Phe Ser Leu Val Gly
                                    10
Leu Phe Gln Tyr Gly His Met Asp Thr Phe Leu Phe Thr Val Ile Ser
            20
Ile Leu Phe Ala Val Ala Leu Ile Gly Asn Ile Thr Leu Val Leu Leu
                            40
Ile Arg Leu Asp Gln Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser
                        55
                                             60
Gln Leu Ser Ile Ile Asp Met Met Tyr Ile Ser Thr Thr Val Pro Lys
                    70
                                        75
Met Ala Ala Asn Phe Leu Ser Asp Thr Lys Ala Ile Ser Phe Leu Gly
                                    90
Cys Ala Val Gln Ala Phe Val Phe Leu Thr Leu Gly Gly Ser Glu Ala
                                                     110
Leu Leu Leu Gly Phe Met Ser Tyr Asp Arg Tyr Ile Ala Ile Cys Gln
                            120
Pro Leu His Tyr Pro Val Leu Met Ser Arg Lys Ile Cys Cys Ser Met
                        135
                                            140
Val Ala Gly Ala Trp Ser Ser Ser Ile Asn Ala Phe Ile His Thr
                    150
                                        155
Val Tyr Val Phe Gln Leu Pro Phe Cys Gly Ser Arg Met Val Asn His
                                    170
                165
Phe Phe Cys Glu Val Pro Ser Leu Leu Pro Leu Val Cys Glu Asp Thr
            180
                                185
                                                     190
Ser Gln Tyr Glu Tyr Thr Val Leu Val Ser Gly Leu Val Ile Leu Leu
                            200
Leu Pro Phe Leu Ala Ile Leu Ala Ser Tyr Ala Arg Val Leu Val Val
                        215
                                            220
Val Leu Gln Met Gly Ser Gly Lys Gly Gln Ser Arg Ala Val Ser Thr
                    230
                                         235
Cys Ser Ser His Leu Thr Val Ala Ser Leu Phe Tyr Val Thr Gly Leu
                245
                                    250
Ser Thr Tyr Thr Gln Pro His Ser Leu His Ser Pro Gly Arg Asp Lys
            260
                                265
                                                     270
Val Val Ala Val Leu Tyr Ser Ile Val Thr Pro Val Leu Asn Pro Phe
        275
                            280
                                                 285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Met Gly Ala Leu Arg Arg Gln
    290
                        295
                                            300
Met Gly
305
```

```
<211> 259
<212> PRT
<213> Mus musculus
<220>
<221> CONFLICT
<222> (71)...(83)
<223> Any amino acid
<400> 2288
Met Asp Leu Thr Thr Trp Met Asn Asn Tyr Thr Gly Gln Ser Asp Phe
                                   10
Thr Leu Val Gly Leu Phe Ser Gln Ser Lys His Pro Ala Leu Leu Ala
            20
                               25
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Gly Asn Ala Leu
        35
                           40
                                               45
Leu Ile Leu Leu Ile Leu Ser Asp Thr His Leu His Thr Pro Met Tyr
                       55
65
                   70
                                       75
Xaa Xaa Xaa Val Cys Leu Leu Leu Met Ser Val Cys Trp Val Leu Gly
               85
                                   90
Ser Leu Trp Asp Gly Phe Met Leu Thr Pro Val Thr Met Thr Phe Pro
           100
                               105
                                                   110
Ile Cys Gly Ser Arg Glu Ile His His Phe Phe Cys Glu Val Pro Ala
       115
                           120
                                               125
Val Thr Lys Leu Ser Cys Ser Asp Thr Trp Leu Tyr Glu Thr Leu Met
                       135
                                           140
Tyr Val Cys Cys Val Leu Met Leu Leu Ile Pro Val Thr Val Ile Ser
145
                   150
                                       155
                                                           160
Gly Ser Tyr Thr Ser Ile Leu Leu Thr Val Leu Arg Met Asn Ser Ala
               165
                                   170
                                                       175
Glu Gly Arg Lys Lys Ala Leu Ala Thr Cys Ser Ser His Met Thr Val
           180
                               185
                                                   190
Val Thr Leu Phe Tyr Gly Ala Ala Val Tyr Thr Tyr Met Leu Pro Ala
        195
                           200
                                               205
Ser Leu His Thr Pro Glu Lys Asp Met Val Val Ser Val Phe Tyr Thr
                       215
                                           220
Ile Leu Thr Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys
                   230
                                       235
Asn Val Thr Glu Ala Met Lys Lys Leu Leu Gly Glu Asn Pro Ser Phe
                                   250
Gln Lys Gln
<210> 2289
<211> 307
<212> PRT
<213> Mus musculus
<400> 2289
Trp Asp Leu Ser Ser Pro Ile Leu Leu Gly Leu Phe Pro Glu Leu Cys
                5
                                   10
His Leu Gly Ile Leu Val Ile Ser Ile Leu Leu Ile Tyr Leu Ile Ala
           20
                               25
                                                   30
```

```
40
Leu Arg Thr Pro Met Tyr Ile Leu Leu Ser Gln Leu Ser Ser Leu Leu
Leu Asp Leu Ala Leu Ile Ser Ala Thr Ala Pro Lys Met Val Ile Asn
                    70
Phe Phe Ser Arg Lys Lys Ser Ile Ser Lys Val Ala Cys Gly Thr Gln
Ile Phe Cys Phe Phe Ala Leu Gly Gly Arg Glu Cys Leu Leu Thr
                                105
            100
Leu Met Ala Tyr Asn His Tyr Val Ala Val Cys His Pro Leu Arg Tyr
                            120
Ser Ile Ile Met Asn Asn Arg Val Cys Leu Trp Met Ala Leu Met Ser
                        135
                                            140
Trp Gly Gly Gly Ala Leu Asn Ser Leu Ile Asn Thr Phe Tyr Ile Met
                    150
                                        155
His Phe Pro Phe Cys Gly Ser Arg Glu Ile His His Phe Phe Cys Glu
                165
                                    170
Leu Ser Thr Val Leu Arg Leu Ser Cys Glu Glu Thr Ser Leu Tyr Glu
            180
                                185
Met Val Val Ser Val Asn Cys Ile Val Phe Val Leu Leu Leu Gly
                            200
        195
Leu Ile Thr Ser Ser Tyr Leu Leu Ile Phe Leu Asp Val Leu Arg Ile
                        215
                                            220
Asn Ser Pro Glu Gly Arg Arg Lys Ala Leu Ala Thr Phe Ser Ser His
                    230
                                        235
Leu Ala Val Val Ser Leu Tyr Tyr Gly Pro Ala Tyr Ile Tyr Met Thr
                245
                                    250
Pro Thr Thr Phe His Thr Pro Glu Gln Asn Glu Ile Leu Ala Met Ile
            260
                                265
Asn Thr Ile Phe Thr Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg
                            280
                                                285
Asn Lys Glu Val His Ala Ala Leu Arg Lys Val Met Ser Gln Arg Phe
  290
                        295
Ile Leu Lys
305
<210> 2290
<211> 119
<212> PRT
<213> Mus musculus
<400> 2290
Met Ser Asn Tyr Thr Thr Gln Ser Asp Leu Thr Leu Ala Gly Leu Phe
                                    10
Ser Arg Ser Lys His Pro Val Leu Leu Ala Val Val Ile Phe Val Val
            20
                                25
Phe Leu Met Ala Leu Ser Gly Asn Ala Leu Leu Ile Leu Leu Ile Leu
                            40
Ser Asp Thr His Leu His Thr Pro Met Tyr Phe Phe Ile Ser Gln Leu
                        55
Ser Leu Met Asp Met Arg Tyr Ile Ser Val Thr Val Pro Lys Met Leu
Met Asp Gln Val Leu Gly Ser His Lys Ile Ser Pro Ala Ala Cys Gly
Met Gln Met Phe Leu Tyr Leu Thr Leu Ala Gly Ser Glu Phe Phe Pro
Leu Ala Ala Met Ser Tyr Glu
```

Phe Thr Gly Asn Ala Ile Leu Val Leu Leu Ile Trp Ala Asp Ser His

```
<211> 277
<212> PRT
<213> Mus musculus
<400> 2291
Tyr Leu Val Thr Val Phe Gly Asn Leu Ser Thr Ile Leu Leu Ile Gly
                                     10
Val Ser Ser Lys Leu His His Pro Met Tyr Phe Phe Leu Ser His Leu
            20
                                25
Ala Ser Val Asp Met Gly Leu Ser Ser Ser Val Thr Pro Asn Met Leu
Val Asn Phe Leu Thr Glu Lys Asn Thr Ile Ser Tyr Leu Gly Cys Gly
                        55
Ile Gln Leu Ser Ser Ala Ala Phe Phe Gly Ala Val Glu Phe Phe Leu
                    70
                                        75
Leu Ala Ala Met Ala Tyr Asp Arg Leu Val Ala Ile Cys Asn Pro Leu
                                    90
                8.5
Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys Ile Gln Leu Val Val
            100
                                105
                                                     110
Gly Thr Tyr Val Gly Gly Phe Leu Asn Ala Ser Phe Val Thr His Phe
        115
                            120
                                                 125
Phe Phe Ser Phe Leu Phe Cys Gly Pro Asn Arg Val Asn His Phe Phe
                        135
                                             140
Cys Asp Leu Ser Pro Met Met Glu Leu Ser Cys Ser Asp Val Ser Ile
                    150
                                        155
Ser Glu Ile Val Ile Ser Phe Ser Ala Gly Ser Phe Thr Met Thr Thr
                                    170
                165
Leu Phe Val Ile Val Ile Ser Tyr Phe Tyr Ile Val Ile Thr Ile Leu
            180
                                185
                                                     190
Lys Met His Ser Thr Glu Gly Arg Gln Lys Ala Phe Ser Thr Cys Met
        195
                            200
                                                 205
Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly Thr Thr Ile Phe Ile
                        215
                                             220
Tyr Val Met Pro Lys Ser Ile Tyr Ser Arg Asp Gln Asn Lys Val Val
                    230
                                        235
Ser Leu Phe Tyr Val Val Val Ile Pro Val Leu Asn Pro Leu Ile Tyr
                245
                                    250
Ser Leu Arg Asn Asn Glu Ile Lys Asp Ala Leu Lys Arg Gln Phe Tyr
            260
                                265
Arg Lys Thr Leu Leu
        275
<210> 2292
<211> 208
<212> PRT
<213> Mus musculus
<400> 2292
Met Ile Ser Tyr Gly Phe Pro Gly Gln Trp Asn His Thr Ala Val Thr
                                    10
Glu Phe Ile Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Val Ile
                                25
Leu Phe Ser Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn
```

```
Leu Ser Thr Phe Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro
Met Tyr Phe Phe Leu Ser His Leu Ala Ser Val Asp Met Gly Leu Ser
                    70
Ser Ser Val Thr Pro Asn Met Leu Val Asn Phe Leu Thr Glu Arg His
                                    90
Ser Ile Ser Tyr Leu Gly Cys Gly Ile Gln Leu Ser Ser Ala Ala Phe
            100
                                105
Phe Gly Ala Val Glu Phe Phe Leu Leu Ala Val Met Ala Tyr Asp Arg
       115
                            120
                                                125
Phe Ile Ala Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Leu Ser Thr
                       135
                                            140
Gln Val Cys Ile Gln Leu Val Val Gly Ser Tyr Val Gly Gly Phe Leu
                   150
                                        155
Asn Ala Ser Phe Val Thr His Phe Phe Phe Ser Phe Phe Phe Cys Gly
                                    170
                                                        175
               165
Pro Asn Arg Val Asn Tyr Phe Phe Cys Asp Phe Pro Pro Met Met Glu
           180
                               185
                                                    190
Leu Ser Cys Ser Asp Val Ser Val Ser Gly Ile Val Ile Ser Phe Thr
```

```
<210> 2293
```

<400> 2293

Met Ala Phe Ile Tyr Asn Gly Ser Gln Thr Thr Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Lys Val Ile Leu Phe Ser 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Phe Gly Asn Leu Ser Thr 40 45 Ile Leu Leu Ile Gly Val Ser Ser Lys Leu His His Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Ser Val Asp Met Gly Leu Ser Ser Val 75 Thr Pro Asn Met Leu Val Asn Phe Leu Thr Glu Lys Asn Thr Ile Ser Tyr Leu Gly Cys Gly Ile Gln Leu Ser Ser Ala Ala Phe Phe Gly Ala 100 105 Val Glu Phe Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Leu Val Ala 120 125 Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys 135 140 Ile Gln Leu Val Val Gly Thr Tyr Val Gly Gly Phe Leu Asn Ala Ser 150 Phe Val Thr His Phe Phe Leu Ser Phe Cys Gly Pro Asn Arg Val 165 170 Asn

<210> 2294

<211> 177

<212> PRT

<213> Mus musculus

<211> 189

<212> PRT

<213> Mus musculus

```
<400> 2294
Met Ala His Asn Asn Glu Ser Thr Val Ser Glu Phe Val Leu Leu Gly
                                    10
Leu Ser Lys Ser Trp Gly Leu Gln Leu Val Leu Phe Thr Ile Phe Phe
                                25
                                                     30
Val Ile Tyr Val Thr Ser Val Leu Gly Asn Ile Met Ile Ile Val Ile
        35
                            40
Ile Phe Ser Asp Ser His Leu Asn Ser Pro Met Tyr Phe Leu Leu Ser
                        55
                                             60
Asn Leu Ser Phe Ile Asp Ile Cys Gln Ser Asn Phe Ala Thr Pro Lys
                                                             80
                    70
                                        75
Met Leu Val Asp Phe Phe Val Glu Tyr Lys Thr Ile Ser Phe Glu Gly
                85
                                    90
Cys Met Ala Gln Ile Phe Leu Leu His Ser Phe Val Gly Ser Glu Met
                                105
                                                     110
            100
Met Leu Leu Val Ala Met Gly Tyr Asp Arg Phe Val Ala Ile Cys Lys
                            120
                                                125
Pro Leu His Tyr Asn Leu Ile Met Asn Arg Arg Val Cys Ile Ile Phe
                        135
                                            140
Val Ser Ile Ser Trp Ala Val Gly Ile Leu His Ser Val Ser His Leu
                    150
                                        155
Ala Phe Thr Val Asn Leu Pro Phe Cys Gly Pro Asn Glu Val Asp Ser
                                    170
                                                         175
Phe Phe Cys Asp Leu Pro Leu Val Ile Lys Leu Ala Cys
            180
<210> 2295
<211> 149
<212> PRT
<213> Mus musculus
<400> 2295
Ala Leu Thr Val Asn Leu Pro Phe Cys Gly His Asn Ile Ile Asn Asn
 1
                                    10
Ile Phe Cys Asp Leu Pro Leu Val Ile Lys Leu Ala Cys Ile Glu Thr
            20
                                 25
Tyr Thr Leu Glu Leu Phe Val Ile Ala Asp Ser Gly Leu Leu Ser Phe
        35
                            40
Ile Ser Phe Phe Leu Leu Val Ser Tyr Thr Val Ile Leu Leu Ile
                        55
Ile Lys His Lys Ser Pro Gly Ser Leu Ser Lys Ala Leu Ser Thr Leu
                                        75
                    70
Ser Ala His Ile Ile Val Val Thr Leu Phe Phe Gly Pro Cys Ile Phe
                                    90
                8.5
Ile Tyr Ala Trp Pro Phe Gly Ser Phe Ala Ser Asn Thr Thr Leu Ala
                                 105
            100
Val Phe Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Ile Ile Tyr Thr
                                                125
        115
                            120
Leu Arg Asn Gln Glu Met Lys Lys Ala Met Arg Lys Leu Trp Ile Gln
                                             140
                        135
    130
Gln Val Ser Cys Thr
145
<210> 2296
<211> 290
```

<212> PRT

<213> Mus musculus

```
<220>
<221> VARIANT
<222> (86)...(91)
<223> Any amino acid
<400> 2296
Met Ala Val Thr Asn Glu Ser His Pro Lys Glu Phe Ile Leu Leu Gly
                                     10
1
Phe Ala Asn His Pro Trp Leu Glu Leu Pro Leu Phe Val Thr Leu Leu
Ile Thr Tyr Pro Met Ala Leu Met Gly Asn Ile Ala Ile Ile Leu Val
        35
Ser Thr Leu Asp Pro Arg Leu Tyr Ser Pro Met Tyr Phe Phe Leu Lys
                                             60
Asn Leu Ser Phe Leu Asp Met Cys Tyr Thr Thr Ser Ile Val Pro Gln
                    70
                                         75
                                                             80
65
Met Leu Phe Asn Leu Xaa Xaa Xaa Xaa Xaa Leu Leu Ala Ile Met
                                     90
Ser Phe Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Thr Leu
            100
                                 105
                                                     110
Ile Met Asn Gln Arg Val Cys Ile Leu Ser Val Ser Ile Met Trp Leu
                            120
                                                 125
Thr Gly Val Ile Phe Gly Phe Ser Glu Ala Thr Leu Thr Leu Gln Leu
                                             140
Pro Leu Cys Gly Thr Asn Lys Leu Asp His Leu Leu Cys Glu Ile Pro
Val Leu Ile Lys Thr Ala Cys Gly Glu Lys Glu Phe Asn Glu Leu Ala
                165
                                     170
Leu Ser Val Val Cys Ile Phe Ile Leu Ile Val Pro Leu Cys Leu Ile
                                 185
                                                     190
            180
Leu Ala Ser Tyr Val Asn Ile Gly Cys Ala Val Leu Arg Ile Lys Ser
                            200
                                                 205
Ser Glu Gly Arg Arg Lys Ala Phe Gly Thr Cys Ser Ser His Leu Ile
                                             220
Val Val Ser Leu Phe Tyr Gly Pro Gly Ile Ser Met Tyr Leu Gln Pro
                    230
Ser Ser Ser Ile Thr Arg Asp Gln Pro Lys Phe Met Ala Leu Phe Tyr
                245
                                     250
Ala Val Ile Thr Pro Thr Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn
                                                     270
Lys Asp Val Lys Gly Ala Phe Lys Lys Leu Leu Arg Ser Ile Phe Ser
                            280
                                                 285
Ser Lys
    290
<210> 2297
<211> 320
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (197)...(270)
<223> Any amino acid
<400> 2297
Met Glu Val Asn Arg Ser Gln Val Thr Asp Phe Val Leu Lys Gly Ile
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10
Thr Asp His Thr Glu Leu Gln Val Pro Leu Phe Leu Leu Phe Phe Phe
Ile Tyr Val Thr Thr Met Val Gly Asn Leu Gly Leu Ile Phe Leu Ile
                       40
Trp Lys Asp Pro His Leu His Thr Pro Met Tyr Tyr Phe Leu Gly Ser
                    5.5
Leu Ala Phe Ala Asp Ala Cys Thr Ser Ser Ser Val Thr Pro Arg Met
                                 75
Leu Val Asn Ile Leu Asp Asn Gly Lys Met Ile Ser Leu Ser Glu Cys
                              90
Met Ala Gln Tyr Tyr Val Phe Gly Ser Ser Ala Thr Thr Glu Cys Phe
                           105
Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                       120
                                        125
Leu Leu Tyr Leu Val Val Met Ser Asn Arg Val Cys Thr Cys Leu Ile
                    135
                                    140
Ser Gly Ser Tyr Ile Ile Gly Phe Leu His Pro Leu Ile His Val Gly
                 150
                                 155
                                                  160
Leu Leu Phe Arg Leu Thr Phe Cys Lys Ser Asn Ile Ile Asp His Phe
                              170
Tyr Cys Glu Ile Leu Pro Leu Tyr Thr Ile Ser Cys Thr Asp Pro Ser
                           185
                                           190
205
215
230
                                 235
250
265
Val Ser Pro Gly Ser Gly Pro Ser Lys Tyr Lys Asn Lys Met Tyr Ser
                       280
                                        285
Leu Phe Tyr Thr Ile Val Ile Pro Leu Leu Asn Pro Phe Ile Tyr Ser
Leu Arg Asn Lys Glu Val Leu Gly Ala Leu Arg Lys Ile Ile Lys Ser
<210> 2298
<211> 306
<212> PRT
<213> Mus musculus
<400> 2298
Met Thr Val Glu Asn Gln Thr Val Val Ala Val Phe Val Leu Thr Gly
1
Leu Thr Glu Arg Pro Glu Leu Gln Val Pro Leu Phe Leu Val Phe Phe
Thr Ile Tyr Leu Ile Thr Met Val Gly Asn Leu Gly Leu Ile Ala Leu
                       40
Ile Trp Lys Asp Pro His Leu His Thr Pro Met Tyr Leu Phe Leu Gly
                    55
Ser Leu Ala Phe Ala Asp Ala Cys Ala Ser Ser Ser Val Thr Pro Lys
                70
                                 75
Met Leu Val Asn Phe Leu Ser Lys Asp His Arg Thr Phe Leu Val Glu
```

```
Cys Phe Thr Gln Phe Tyr Phe Phe Gly Ser Ser Ala Thr Thr Glu Cys
                                105
Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Pro Val Met Met Ser Asn Ser Leu Cys Met Lys Phe
                        135
Ile His Val Ser Tyr Ile Val Gly Phe Leu His Ser Ala Ile His Val
                                        155
Gly Leu Leu Val Arg Leu Asn Phe Cys Lys Ser Asn Ile Ile His Tyr
                165
                                    170
Phe Tyr Cys Glu Ile Leu Gln Leu Phe Lys Ile Ser Cys Thr Asp Pro
                                185
Thr Met Asn Val Leu Leu Val Leu Ile Phe Ser Ala Leu Ile Gln Gly
       195
                            200
Leu Thr Phe Met Thr Ile Ile Val Ser Tyr Phe Ser Val Leu Leu Ala
                        215
Ile Leu Lys Thr Lys Ser Glu Arg Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ala His Leu Leu Ser Val Ser Leu Phe Tyr Gly Thr Leu Phe
                245
                                    250
Leu Met Tyr Val Arg Pro Gly Ser Gly Ser Gly Glu Asp Lys Asp Arg
                                265
Met Tyr Ser Leu Phe Tyr Thr Ile Ile Ile Pro Phe Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Ala Ala Leu Arg Arg Lys
   290
                        295
Met Lys
305
<210> 2299
<211> 236
<212> PRT
<213> Mus musculus
<400> 2299
Ser Ser Thr Val Thr Pro Lys Met Leu Gln Asp Ile Phe Ser Lys Ser
                                    10
Lys Leu Ile Ser Phe Ser Glu Cys Met Ile Gln Phe Phe Ser Phe Val
            20
                                25
Val Ser Thr Thr Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp
                            40
Arg Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Pro Val Ile Met Thr
                        55
Asn Arg Leu Cys Val Arg Leu Leu Thr Leu Ser Phe Leu Gly Gly Phe
                   70
                                        75
Ile His Ala Leu Ile His Glu Gly Phe Leu Phe Arg Leu Ile Phe Cys
               85
                                    90
Arg Ser His Ile Ile Asn His Phe Tyr Cys Asp Val Met Pro Leu Leu
           100
                                105
                                                    110
Lys Ile Ser Cys Asn Asp Pro Ser Ile Asn Tyr Leu Met Leu Phe Ile
                            120
                                                125
Phe Ser Gly Ser Ile Gln Val Phe Thr Ile Thr Thr Ile Leu Val Ser
                        135
                                            140
Tyr Thr Leu Val Leu Phe Ser Ile Leu Lys Lys Ser Leu Lys Ser
                   150
                                       155
Ile Lys Lys Ala Phe Ser Thr Cys Gly Ala His Leu Leu Ser Val Ser
```

170

Leu Tyr Tyr Gly Pro Leu Leu Phe Met Tyr Val Arg Pro Ala Ser Pro

```
180
                                185
Gln Val Asn Asp Glu Asp Met Met Asp Ser Val Phe Tyr Thr Ile Ile
                            200
                                                205
        195
Ile Pro Val Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Glu Gln Val
                        215
Lys Lys Ser Leu Ala Lys Cys Leu Arg Arg Asn Ser
                    230
<210> 2300
<211> 306
<212> PRT
<213> Mus musculus
<400> 2300
Glu Ile Lys Asn Ser Thr Val Leu Thr Glu Phe Val Leu Thr Gly Leu
Thr Gly Ser Pro Glu Leu Gln Val Pro Leu Phe Leu Phe Phe Leu Val
Ile Tyr Leu Ile Thr Ile Val Gly Asn Leu Gly Leu Ile Ala Leu Ile
                            40
Trp Asn Asp Pro His Leu Tyr Ile Pro Met Tyr Phe Phe Leu Gly His
                        55
Leu Ala Phe Val Asp Ala Cys Leu Ser Ser Thr Val Ala Pro Lys Met
                                        75
                    70
Leu Leu Asp Phe Leu Gln Met Asn Lys Met Ile Ser Tyr Ser Glu Cys
Met Thr Gln Phe Phe Ile Phe Ala Ile Cys Val Thr Thr Glu Cys Phe
            100
                                105
Leu Leu Ser Ala Leu Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
        115
                            120
Leu Leu Tyr Pro Met Ile Met Thr Asn Arg Leu Cys Ile Cys Leu Leu
                        135
                                            140
Val Leu Ser Phe Val Gly Gly His Ser Ser Ile His Glu Gly Phe Leu
                    150
Leu Leu Thr Phe Cys Asn Ser Asn Ile Val His Gln Phe Phe Cys
                                    170
                165
Asp Thr Val Pro Leu Leu Lys Ile Ser Cys Thr Asp Thr Thr Leu Asn
            180
                                185
Phe Gln Leu Phe Val Phe Ala Gly Ile Ile Gln Val Leu Thr Val
        195
                            200
Leu Ile Val Phe Val Ser Tyr Thr Leu Val Leu Phe Met Ile Leu Gln
                        215
Arg Lys Ser Val Gln Gly Met Lys Lys Ala Phe Ser Thr Cys Gly Ala
                    230
His Leu Leu Ser Val Ser Leu Tyr Tyr Gly Pro Leu Leu Ile Met Tyr
                                    250
Val Phe Pro Val Ser Gln Glu Ala Asp Gly Gln Asp Ile Ile Asp Ser
                                265
Leu Phe Tyr Thr Ile Ile Ile Pro Val Leu Asn Pro Ile Ile Tyr Ser
                            280
Leu Arg Asn Lys Gln Val Ile Asp Ser Leu Lys Lys Val Leu Lys Lys
    290
                                            300
Lys Val
305
```

<210> 2301 <211> 161 <212> PRT

<210> 2303 <211> 133 <212> PRT

<213> Mus musculus

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<400> 2303
Phe Tyr Cys Asp Val Met Pro Leu Leu Ser Ile Ser Cys Asn Asp Pro
                                    10
Ser Ile Asn Tyr Leu Met Leu Phe Ile Phe Ser Gly Ser Ile Gln Val
            20
                                25
Phe Thr Ile Thr Thr Ile Leu Val Ser Tyr Thr Leu Val Leu Phe Ser
                            40
Ile Leu Lys Gln Lys Ser Leu Lys Ser Ile Lys Lys Ala Phe Ser Thr
                        55
Cys Gly Ala His Leu Leu Ser Val Ser Leu Tyr Tyr Gly Pro Leu Leu
65
                    70
                                        75
Phe Met Tyr Val Arg Pro Ala Ser Pro Gln Val Asn Asp Glu Asp Met
                85
                                    90
Met Asp Ser Val Phe Tyr Thr Ile Ile Ile Pro Val Leu Asn Pro Ile
                                105
Ile Tyr Ser Leu Arg Asn Lys Gln Val Lys Lys Ser Leu Ala Lys Phe
        115
                            120
Leu Arg Arg Asn Thr
   130
<210> 2304
<211> 307
<212> PRT
<213> Mus musculus
<400> 2304
Met Glu Asn Asp Ser Phe Val Ser Glu Phe Ile Leu Met Gly Leu Thr
Asp His Pro Glu Leu Gln Leu Ser Leu Phe Val Leu Phe Leu Met Asn
                                25
Tyr Thr Ala Ile Val Met Gly Asn Leu Ser Leu Met Ile Leu Ile Phe
Leu Asn Ser Asn Leu His Thr Pro Met Tyr Phe Phe Ile Phe Asn Leu
Ser Phe Ile Asp Phe Cys Tyr Ser Phe Val Phe Thr Pro Lys Met Leu
                    70
Met Ser Phe Phe Leu Glu Lys Asn Thr Ile Tyr Phe Arg Gly Cys Met
                                    90
                                                         95
Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Asn Ser Glu Ser Tyr Val
            100
                                105
Leu Thr Ala Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys Lys Pro Leu
                            120
        115
Leu Tyr Lys Thr Ile Met Val Pro Arg Ile Cys Cys Leu Leu Met Phe
```

130 140 Val Tyr Leu Ile Gly Phe Thr Ser Ala Met Ile Leu Thr Gly Leu Met 150 155 Phe Arg Leu Asn Phe Cys Asn Asn His Ile Ile Asn His Tyr Met Cys 170 Asp Ile Phe Pro Val Ile Gln Ile Ser Cys Ser Asp Thr Tyr Leu Asn 180 185 Glu Leu Val Ser Thr Ala Val Val Gly Thr Gly Ile Ile Leu Cys Ser 200 205 Leu Leu Ile Leu Met Ser Tyr Ala Leu Ile Leu Phe Asn Ile Leu Asn 215 220 Met Ser Ser Gly Lys Gly Trp Ser Lys Ala Met Gly Thr Cys Gly Ser 230 235 His Ile Ile Thr Val Ser Leu Phe Tyr Gly Ser Gly Leu Leu Ala Tyr 245 250

Val Lys Pro Ser Ser Ala Glu Thr Val Gly Gln Gly Lys Phe Phe Ser Leu Phe Tyr Thr Phe Leu Val Pro Val Leu Asn Pro Phe Ile Tyr Ser 280 Pro Gln Asn Lys Asp Val Lys Val Ala Val Lys Lys Thr Leu Lys Arg 295 300 Ile Ser Asn 305 <210> 2305 <211> 312 <212> PRT <213> Mus musculus <400> 2305 Met Val Leu Asp Asn Gly Ser Tyr Met Thr Glu Phe Ile Leu Leu Val Leu Asn Asp Pro Asp Leu Gln Leu Pro Leu Phe Leu Leu Phe Leu Leu 25 Ile Tyr Thr Thr Thr Leu Gly Asn Leu Ala Leu Ile Thr Leu Ile 40 Ala Leu Asn Ser Leu Leu His Ser Pro Thr Tyr Cys Ser Pro Leu Asn 55 60 Leu Ser Leu Ile Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys Met 75 Leu Met Asn Phe Leu Val Arg Lys Asn Ile Ile Ser Tyr Met Glu Cys 90 Leu Pro Ser Ser Leu Leu Phe Val Phe Cys Phe Ser Ala Ile Cys Glu 100 105 110 Cys Cys Val Leu Ile Ser Met Ala Tyr Asp Asn Tyr Met Ala Val Cys 115 120 125 Asn Pro Val Leu Tyr Asn Ile Thr Ile Ser Pro Lys Val Cys Ser Tyr 135 140 Leu Met Leu Gly Ser His Ile Met Arg Phe Ser Gly Ala Met Ile His 150 155 Thr Gly Ser Ile Leu Arg Leu Pro Phe Cys Asp Arg Ser Ile Ile Lys 170 175 His Tyr Phe Cys Glu Leu Phe Pro Leu Leu Gln Leu Ser Cys Thr Ser 180 185 190 Ile Tyr Ala Asn Glu Ile Glu Ile Leu Ile Ile Asp Ser Lys Asp Ile 200 205 Ile Val Ser Ser Val Ile Ile Phe Thr Ser Tyr Gly Phe Ile Leu Ser 215 220 Asn Ile Leu Gln Met Arg Ser Thr Ala Gly Met Ser Lys Ala Phe Ser 230 235 Thr Cys Ile Ser His Ile Leu Thr Phe Ser Leu Phe Phe Gly Ser Cys 245 250 Ala Leu Met Tyr Leu His Pro Ser Ser Pro Gly Ser Met Asp Gln Gly 260 265 270 Lys Val Ser Ser Val Phe Tyr Ile Ile Val Val Pro Met Met Asn Pro 280 285 Leu Ile Phe Ser Phe Arg Asn Lys Asp Ile Lys Ile Ala Leu Arg Lys 295 Val Leu Ser Lys Lys Arg Phe Leu 310

```
<212> PRT
<213> Mus musculus
<400> 2306
Met Ala Ser Gly Asn Asp Ser Thr Thr Val Lys Glu Phe Ile Leu Leu
Gly Leu Thr Gln Gln Pro Glu Leu Gln Leu Pro Phe Phe Leu Phe
Leu Gly Ile Tyr Val Val Ser Ile Val Gly Asn Leu Gly Leu Ile Val
Leu Ile Val Leu Asn Pro His Leu His Thr Pro Met Tyr Tyr Phe Leu
                        55
Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Ser Val Ile Thr Pro
                                        75
                    70
Lys Met Leu Val Gly Phe Val Lys Gln Asn Ile Ile Ser His Ala Glu
                                    90
Cys Met Thr Gln Leu Phe Phe Phe Ala Phe Phe Val Ile Asp Glu Cys
            100
                                105
Cys Ile Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
                                                 125
Pro Leu Leu Tyr Lys Val Thr Met Ser Tyr Gln Val Cys Phe Met Met
                        135
                                            140
Thr Val Ser Val Tyr Met Met Gly Phe Val Gly Ala Ile Ala His Thr
                    150
                                        155
Ile Cys Met Leu Arg Leu Thr Phe Cys Asp Gly Asn Ile Ile Asn His
                165
                                    170
                                                         175
Tyr Met Cys Asp Ile Pro Pro Leu Leu Lys Leu Ser Cys Thr Asn Thr
            180
                                185
                                                     190
Ser Val Asn Glu Leu Val Val Phe Ile Val Val Gly Val Asn Val Ile
                            200
                                                 205
        195
Gly Pro Thr Leu Ile Ile Phe Thr Ser Tyr Thr Leu Ile Ile Phe Asn
                        215
                                            220
Ile Ser His Ile Arg Ser Thr Glu Gly Arg Ser Lys Ala Ile Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ile Ala Val Ser Ile Phe Phe Gly Ala Ser Ala
                245
                                    250
Phe Met Tyr Leu Lys Pro Ser Pro Val Gly Ser Val Gly Glu Asp Lys
                                265
Val Ser Thr Val Phe Tyr Thr Ile Val Gly Pro Met Leu Asn Pro Phe
                            280
                                                 285
Ile Tyr Ser Leu Arg Asn Lys Asp Val His Ile Ala Leu His Lys Thr
                        295
Leu Lys Lys Ser Met Leu Ile
<210> 2307
<211> 235
<212> PRT
<213> Mus musculus
<400> 2307
Met Asp Ser Phe Asn Ala Thr Leu Glu Glu Arg Phe Phe Leu Val Gly
Phe Leu Asp Trp Pro Gln Leu Glu Leu Ile Leu Phe Val Phe Ile Ser
            2.0
Ile Phe Tyr Ser Leu Thr Ile Phe Gly Asn Thr Ala Ile Ile Ala Leu
        35
```

<211> 311

```
Ser Gln Met Asp Leu Arg Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln
                    70
Leu Leu Ile Asn Leu His Gly Leu Asp Arg Thr Ile Ser Tyr Gly Gly
                                    90
Cys Val Ala Gln Leu Phe Ile Ser Leu Ala Leu Gly Ser Thr Glu Cys
Val Leu Leu Val Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg
                            120
Pro Leu His Tyr Met Thr Ile Met His Pro Leu Leu Cys Gln Ala Leu
                                            140
Ala Leu Ala Ser Trp Val Gly Gly Phe Leu Asn Ser Leu Ile Gln Thr
                    150
                                        155
Gly Leu Met Met Ala Met Pro Leu Cys Gly His Arg Leu Asn His Phe
                                    170
Phe Cys Glu Met Pro Val Phe Leu Lys Leu Ala Cys Gln Asp Thr Gly
                                185
Gly Thr Glu Ala Lys Met Phe Val Ala Arg Ala Ile Ile Leu Val Phe
Pro Ala Thr Leu Ile Leu Gly Ser Tyr Gly His Ile Ala Lys Ala Val
                        215
Leu Lys Val Lys Ser Thr Ala Gly Arg Arg Lys
                    230
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 2308

Met Gln Asn Gln Ser Ile Val Thr Glu Phe Ile Leu Leu Gly Leu Ser Gln Asn Pro Lys Val Glu Lys Ile Leu Ser Val Leu Phe Phe Leu Val 25 Tyr Leu Ala Thr Ile Gly Gly Asn Ile Ile Ile Val Val Thr Ile Val 40 Phe Ser Pro Ala Leu Ser Gly Ser Pro Met Tyr Phe Phe Leu Ser Phe Leu Ser Phe Leu Asp Ala Cys Val Ser Ser Val Ile Thr Pro Lys Met Ile Val Asp Phe Phe Tyr Glu Arg Lys Thr Ile Ser Phe Glu Cys Cys Met Ile Gln Leu Phe Ala Val His Phe Phe Thr Gly Val Glu Val Ile 105 Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 Leu His Tyr Ser Ser Ile Met Thr Gln Arg Leu Cys Gly Ile Leu Val 140 Gly Ile Ala Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile 150 155 Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe 170 Val Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asn Thr His 185 Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile 200 Ile Phe Ser Ile Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu

```
215
   210
Arg Asn His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly
                   230
                                        235
Ser His Ile Thr Gly Val Leu Leu Phe Phe Val Pro Cys Ile Leu Ile
               245
                                    250
Tyr Ala Arg Asn Asn Ser Glu Phe Ser Phe Glu Lys Asn Val Phe Ile
           260
                               265
Phe Asp Asp Val Leu Thr Pro Met Leu Asn Pro Leu Ala Tyr Thr Phe
                           280
 275
Arg Asn Lys Glu Met Lys Asn Ala Ile Lys Lys Met Trp Arg Arg Leu
                       295
Phe Asn Ile Ser Asp Lys His
                    310
<210> 2309
<211> 264
<212> PRT
<213> Mus musculus
<400> 2309
Met Asn Ser Ile Tyr Phe Asn Ile Leu Leu Glu Ile Met Gln Asn Gln
                 5
                                    10
Ser Phe Val Thr Glu Phe Ile Phe Leu Gly Leu Ser Gln Asn Pro Lys
           20
                                25
Val Gln Lys Ile Val Phe Ile Val Phe Leu Phe Val Tyr Ile Ala Thr
                                                45
       35
                           40
Val Gly Gly Asn Met Ile Ile Val Val Thr Ile Val Cys Ser Pro Ala
                        5.5
Leu Ile Asp Cys Pro Met Tyr Phe Phe Leu Ala Phe Leu Ser Leu Leu
                   70
                                       75
Asp Ala Cys Phe Ser Ser Val Ile Thr Pro Lys Met Val Val Asp Ser
              8.5
                                    90
Leu Tyr Glu Lys Lys Thr Ile Ser Phe Glu Gly Cys Met Met Gln Leu
                               105
                                                   110
           100
Phe Ala Glu His Phe Leu Ala Ala Val Glu Val Ile Val Leu Thr Ala
 115
                           120
                                                125
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Ser
                       135
                                           140
Ser Ile Met Asn Trp Arg Leu Cys Gly Thr Leu Met Gly Ile Ala Trp
                  150
                                        155
Thr Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile Phe Thr Leu Gln
               165
                                    170
Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met Cys Asp Leu
                                                   190
          180
                                185
Phe Pro Leu Glu Leu Ala Cys Thr Asp Thr His Ile Phe Gly Leu
                           200
                                                205
Leu Val Val Ala Asn Ser Gly Ser Ile Cys Ile Ile Ile Phe Ser Ile
                       215
                                           220
Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu Lys Asp His Ser
                  230
                                       235
Ser Glu Gly Arg Trp Lys Ala Leu Ser Thr Cys Gly Ser His Ile Ala
                245
                                    250
Val Val Leu Phe Phe Val Pro
            260
```

```
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (124)...(301)
<223> Any amino acid
<400> 2310
Met Trp Ile His Leu Glu Phe Met Glu Asn His Lys Asn Val Thr Glu
Phe Ile Phe Met Gly Leu Trp Glu Asn Arg Gln Ile Glu Leu Leu Phe
       20
                  25
Phe Leu Leu Phe Leu Leu Cys Tyr Leu Ala Val Leu Met Gly Asn Ser
                40
Val Ile Leu Leu Thr Ile Thr Cys Ser His Leu Ile Glu Gln Pro Met
Tyr Tyr Phe Leu Cys His Leu Ser Leu Met Asp Leu Cys Tyr Thr Ser
           70
                       75
Thr Val Ile Pro Arg Leu Ile Arg Asp Leu Ala Ala Thr Arg Lys Asn
                     90
                                95
Ile Ser Tyr Asn Glu Cys Met Thr Gln Leu Phe Thr Ala His Leu Leu
       100
                  105
                              110
Ala Gly Val Glu Ile Phe Ile Leu Val Ser Arg Xaa Xaa Xaa Xaa
    115
                120
                            125
130
              135
                         140
150
                       155
170
185
                              190
195
                200
                            205
215
                         220
230
                       235
245
                     250
                                255
260
                  265
                              270
275
                280
                            285
295
                         300
Val Ile Ala Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Ser
           310
                       315
Glu Met Lys Ser Ala Met His Lys Val Trp Ser Arg Leu Ser Leu Arg
                     330
         325
Val Glu Val Ser Glu Arg Ile Leu
       340
```

<210> 2311

<211> 157

<212> PRT

<213> Mus musculus

```
<400> 2311
Ser Ile Ile Gln Ile Ile Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro
Asn Val Ile Asp His Phe Met Cys Asp Leu Phe Pro Leu Leu Glu Leu
           20
                              25
Ala Cys Thr Asn Thr Tyr Val Tyr Gly Leu Leu Val Phe Ala Asn Ser
                          40
Gly Ser Ile Cys Ile Ile Ile Phe Ser Met Leu Leu Ile Ser Tyr Gly
                      55
Val Ile Leu Phe Ser Leu Arg Ser His Ser Ser Glu Gly Arg Trp Lys
                  70
                                     75
                                                        80
Ala Leu Ser Thr Cys Gly Ser His Ile Ala Val Val Ser Phe Phe
               85
                                 90
Val Pro Cys Ile Phe Ile Tyr Ala Arg Ser Thr Ser Ala Ser Ser Phe
           100
                              105
Glu Lys Lys Val Ala Val Phe Asp Gly Ile Met Thr Pro Leu Leu Asn
       115
                          120
                                             125
Pro Leu Ile Tyr Thr Phe Arg Asn Lys Glu Met Lys Asn Ala Ile Arg
                      135
                                         140
Lys Met Trp Asn Arg Phe Arg Met Val Ser Asp Lys Phe
                  150
                                     155
<210> 2312
<211> 310
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (153)...(226)
<223> Any amino acid
<400> 2312
Met Gly Gln Ser Asn Asn Val Thr Glu Phe Val Leu Leu Gly Phe Thr
                                 10
Gln Asp Pro Ala Gly Gln Lys Ala Leu Phe Val Met Phe Ser Leu Met
           20
                              25
Tyr Ile Ala Thr Met Val Gly Asn Leu Leu Ile Val Gly Thr Val Ile
                                             4.5
                          40
Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
                      55
Ser Leu Met Asp Ala Val Tyr Ser Thr Ala Ile Ser Pro Lys Leu Ile
                                     75
                  70
Val Asp Leu Leu Arg Glu Lys Lys Thr Ile Ser Phe Arg Ala Cys Ile
               85
                                 90
Ser Gln Leu Phe Ile Glu His Leu Phe Gly Gly Val Asp Ile Val Ile
                              105
                                                110
           100
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                                             125
                          120
       115
His Tyr Leu Ile Ile Met Asn Arg Arg Val Cys Ile Leu Leu Val
                                         140
                      135
Met Ala Trp Ala Gly Gly Phe Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa
                  150
                                     155
170
               165
185
```

```
200
215
Xaa Xaa Leu Ser Thr Cys Gly Ser His Ile Thr Val Val Phe Leu Phe
                  230
                                     235
Phe Val Pro Cys Ile Phe Met Tyr Val Arg Pro Val Ser Ser Phe Pro
                                 250
Ile Asp Lys Ser Ile Thr Val Ile Tyr Thr Ile Val Thr Pro Met Leu
           260
                              265
Asn Pro Leu Ile Tyr Thr Leu Arg Asn Ser Glu Met Lys Ile Ser Met
                          280
Glu Lys Leu Gln Lys Thr Leu Ser Pro Cys Arg Ile Arg Leu Ser
   290
                     295
                                         300
Ser Cys Cys Leu Cys Tyr
305
                  310
<210> 2313
<211> 120
<212> PRT
<213> Mus musculus
<400> 2313
Met Gly Gln Ser Asn Asn Val Thr Glu Phe Val Leu Leu Gly Phe Thr
1
Gln Asp Pro Ala Gly Gln Lys Ala Leu Ser Val Met Phe Ser Leu Ile
           20
                              25
Tyr Ile Val Thr Met Val Gly Asn Leu Leu Ile Val Gly Thr Val Ile
Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
                      55
Ser Leu Met Asp Ala Ile Tyr Ser Thr Ala Ile Thr Pro Lys Leu Ile
                  70
Val Asp Leu Leu Cys Glu Lys Lys Thr Ile Ser Phe Arg Ala Cys Ile
              85
                                 90
Ser Gln Leu Phe Ile Asp His Leu Phe Gly Gly Val Asp Ile Val Ile
           100
                             105
Leu Leu Ala Met Ala Leu Asp Arg
       115
<210> 2314
<211> 312
<212> PRT
<213> Mus musculus
<400> 2314
Met Glu Arg Val Asn Gln Ser Val Val Ser Glu Phe Val Phe Leu Gly
                                 10
Leu Thr Asn Ser Trp Ser Ile Gln Leu Phe Leu Phe Val Phe Ser Ser
           20
                             2.5
Thr Phe Tyr Val Ala Ser Met Met Gly Asn Ser Leu Ile Val Phe Thr
       35
                          40
Val Ala Ser Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Ala
                      55
                                        60
Asn Leu Ser Phe Ile Asp Leu Gly Val Ser Ser Val Thr Ser Pro Lys
                                     75
Met Ile Tyr Asp Leu Phe Arg Lys His Lys Val Ile Ser Phe Thr Gly
```

```
85
Cys Val Thr Gln Ile Phe Phe Ile His Val Ile Gly Gly Val Glu Met
                                105
Val Leu Leu Ile Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu His Tyr Leu Thr Ile Met Ser Pro Arg Met Cys Ile Leu Phe
                        135
Ser Val Thr Ala Trp Val Val Gly Leu Met His Ser Leu Ile Gln Leu
                    150
                                        155
Ala Phe Val Val Asn Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Ser
                                    170
                                                        175
Phe Tyr Cys Asp Leu Pro Arg Phe Ile Lys Leu Ala Cys Ile Asn Thr
            180
                                185
                                                    190
Tyr Gln Leu Glu Leu Met Val Thr Ala Asn Ser Gly Phe Ile Ser Val
        195
                            200
Gly Ser Phe Phe Ile Leu Ile Ile Ser Tyr Ile Val Ile Ile Ile Thr
Val Gln Lys His Ser Ser Ser Gly Ser Ser Lys Ala Leu Ser Thr Leu
                    230
                                        235
Ser Ala His Ile Ser Val Val Phe Leu Phe Phe Gly Pro Leu Ile Phe
                                    250
Phe Tyr Thr Trp Pro Ser Pro Ser Thr His Leu Asp Lys Phe Leu Ala
            260
                                265
Ile Phe Asp Ala Val Ile Thr Pro Phe Leu Asn Pro Ile Ile Tyr Thr
        275
                            280
Phe Arg Asn Gln Glu Met Lys Val Ala Met Lys Arg Val Cys Arg Gln
                        295
Leu Val Ser Tyr Arg Lys Ala Ser
305
                    310
<210> 2315
<211> 320
<212> PRT
<213> Mus musculus
<400> 2315
Met Asp Gly Gly Asn His Ser Met Val Ser Glu Phe Leu Leu Gly
Leu Thr Asn Ser Trp Arg Ile Gln Ile Leu Leu Phe Leu Phe Thr
Val Phe Tyr Val Ala Ser Met Leu Gly Asn Leu Leu Ile Val Leu Thr
        35
                            40
Ile Ile Ser Asp His His Leu His Ser Pro Met Tyr Phe Leu Leu Ala
                        55
Asn Leu Ser Phe Ile Asp Thr Gly Val Ser Ser Ile Ala Thr Pro Lys
                    70
                                        75
Met Ile Tyr Asp Leu Phe Arg Lys His Lys Val Ile Ser Leu Asn Gly
                                    90
Cys Ile Thr Gln Met Phe Phe Ile His Thr Val Gly Gly Thr Glu Met
            100
                                105
Val Leu Leu Ile Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys Lys
                            120
Pro Leu His Tyr Leu Thr Ile Met Ser Leu Arg Met Cys Ile Val Leu
                        135
                                            140
Leu Ala Leu Ala Trp Ile Ile Gly Leu Ile His Ser Val Ala Gln Leu
                    150
                                        155
Ala Phe Val Val Asn Leu Pro Phe Cys Gly Ala Asn Lys Met Asp Ser
```

170

```
Phe Tyr Cys Asp Phe Pro Arg Phe Ile Lys Leu Ala Cys Thr Asp Thr
                              185
Tyr Arg Leu Glu Phe Leu Val Ala Ala Asn Ser Gly Phe Ile Ser Met
                          200
                                             205
       195
Ala Thr Phe Phe Ile Leu Ile Val Ser Tyr Ile Phe Ile Leu Val Thr
                      215
Val Arg Lys His Ser Ser Gly Ala Ser Ser Lys Ala Leu Ser Thr Leu
                                     235
                  230
Ser Ala His Ile Thr Val Val Val Phe Phe Gly Pro Cys Ile Ile
               245
                                 250
Val Tyr Val Trp Pro Phe Pro Thr Leu Pro Ile Asp Lys Phe Leu Ala
           260
Ile Phe Asp Val Ile Ile Thr Pro Phe Met Asn Pro Leu Ile Tyr Thr
                                             285
       275
                          280
Leu Arg Asn Asn Glu Met Lys Val Ala Met Arg Arg Leu Phe Ile Arg
                      295
                                         300
Ala Leu His Phe Lys Asn Phe Phe Ile Ser Ser Leu Arg Asp Leu Ser
                  310
<210> 2316
<211> 294
<212> PRT
<213> Mus musculus
<220>
<221> CONFLICT
<222> (59)...(107)
<223> Any amino acid
<400> 2316
Met Asp Gly Glu Asn His Thr Val Val Ser Glu Phe Val Phe Leu Gly
1
                                 10
Leu Thr His Ser Trp Glu Ile Gln Leu Leu Leu Leu Val Leu Ser Ser
                              2.5
Val Leu Tyr Ile Leu Ser Met Ala Gly Asn Ile Leu Ile Val Phe Ser
       35
                          40
Val Thr Ile Asp Pro His Leu His Ser Pro Xaa Xaa Xaa Xaa Xaa Xaa
75
                  70
90
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ile Cys Lys Pro Leu
           100
                              105
His Tyr Leu Thr Ile Met Ser Pro Arg Val Cys Val Leu Phe Leu Gly
                          120
Ala Ala Trp Gly Leu Gly Ile Ser His Ser Leu Phe Gln Leu Ala Phe
                      135
                                         140
Leu Ile Asp Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Ser Phe Tyr
                  150
Cys Asp Leu Pro Arg Leu Leu Arg Leu Ala Cys Lys Asp Thr Tyr Lys
               165
                                 170
                                                    175
Leu Gln Phe Met Val Thr Ile Asn Ser Gly Phe Ile Cys Val Gly Ser
           180
                              185
                                                190
Phe Leu Leu Leu Ile Ser Tyr Ile Phe Ile Leu Phe Ser Val Trp
                          200
                                             205
Lys His Ser Ser Gly Gly Ser Ser Lys Ala Leu Ser Thr Leu Ser Ala
```

215

210

```
His Ile Thr Val Val Phe Leu Phe Phe Gly Pro Thr Leu Phe Ile Tyr
                    230
Thr Trp Pro His Pro Asn Ser Gln Ile Asp Lys Phe Leu Ala Leu Phe
                                    250
                245
Asp Ala Val Leu Thr Pro Phe Leu Asn Pro Val Ile Tyr Thr Phe Arg
Asn Lys Glu Met Lys Val Ala Ile Lys Arg Val Leu Lys Val Leu Leu
                            280
Thr Phe Arg Asn Ile Ser
    290
```

<210> 2317 <211> 323 <212> PRT <213> Mus musculus

<400> 2317

Met Ala Glu Glu Thr Arg Asn Arg Thr Trp Val Arg Glu Phe Val Leu Glu Gly Phe Pro Val Ala Glu His Leu Arg Ile Leu Phe Phe Leu Met 20 His Leu Leu Ala Tyr Leu Ala Ser Ile Met Gly Asn Thr Leu Ile Ile Ser Ile Thr Cys Val Asp His Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser Thr Tyr Ser Phe Val Glu Cys Cys Phe Ile Thr Thr Val Ile 70 Pro Gln Leu Leu Ala Ile Phe Leu Ser Gly Arg Gln Thr Ile Ser Phe 90 Val Ala Cys Phe Thr Gln Ala Leu Val Val Phe Val Leu Gly Ala Thr 105 110 Val Phe Phe Leu Leu Ala Val Leu Ser Leu Asp Arg Tyr Leu Ala Ile 120 125 Cys Lys Pro Leu His Tyr Pro Thr Ile Met Ser Pro Arg Met Cys Phe 130 135 140 Leu Leu Val Thr Val Cys Leu Val Leu Gly Phe Leu Phe Met Ala Gly 150 . 155 Pro Val Val Met Leu Ser Gln Ser Ser Tyr Cys Gly Pro Asn Val Ile 170 Pro His Phe Phe Cys Asp Phe Gly Pro Leu Ala Asn Leu Ser Cys Ser 185 190 Asp Thr Met Ser Val Glu Met Leu Phe Phe Asn Leu Ala Leu Ile Val 200 205 Leu Phe Gly Ser Leu Leu Val Ala Ile Phe Ala Tyr Ser Asn Ile Val 220 Val Thr Ile Val Gly Leu Pro Ser Ala Arg Glu Lys Gln Arg Ala Phe 230 235 Ser Thr Cys Ser Ser His Leu Ile Val Leu Ser Leu Met Tyr Gly Ser 250 Cys Val Phe Ile Tyr Met Lys Pro Lys Gln Thr Ser Arg Leu Asp Thr 260 265 Asn Arg Glu Ala Ala Leu Val Asn Met Val Val Thr Pro Leu Leu Asn 275 280 Pro Val Ile Tyr Thr Leu Arg Asn Lys Gln Val His Gln Ala Leu Arg 295 300 Asp Ala Leu Ser Arg Val Gln Leu Pro Arg Tyr His Arg Ser Ser Ala 310 315 Pro Ser Leu

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<210> 2318
<211> 327
<212> PRT
<213> Mus musculus
<400> 2318
Met Glu Arg Leu Thr Ala Glu Glu Thr Arg Asn Gly Thr Trp Val Gln
                 5
                                    10
Glu Phe Val Leu Glu Gly Phe Pro Val Ala Glu His Leu Arg Ile Leu
                                25
            20
Phe Phe Leu Met His Leu Leu Ala Tyr Leu Ala Ser Leu Met Gly Asn
Thr Leu Ile Ile Ser Ile Thr Cys Leu Asp His Arg Leu Gln Thr Pro
                        55
Met Tyr Phe Phe Leu Ser Thr Phe Ser Phe Val Glu Cys Cys Phe Ile
                    70
                                        75
Thr Thr Val Ile Pro Gln Leu Leu Ala Ile Phe Leu Ser Gly Arg Gln
                85
                                    90
Thr Ile Ser Phe Val Ala Cys Phe Thr Gln Ala Phe Phe Leu Phe
            100
                                105
                                                     110
Leu Gly Ala Thr Val Phe Tyr Leu Leu Ala Val Leu Ser Leu Asp Arg
        115
                            120
                                                 125
Tyr Leu Ala Ile Cys Lys Pro Leu His Tyr Pro Thr Ile Met Ser Pro
                        135
                                            140
Arg Met Cys Phe Leu Leu Val Thr Val Cys Leu Ala Leu Gly Phe Leu
145
                                        155
                    150
Phe Met Ala Gly Pro Val Val Met Leu Ser Gln Ser Ser Tyr Cys Gly
                                    170
                                                         175
                165
Pro Asn Val Ile Pro His Phe Phe Cys Asp Phe Gly Pro Leu Ala Asn
            180
                                185
                                                     190
Leu Ser Cys Leu Asp Thr Arg Ser Val Glu Met Leu Phe Phe Asn Leu
        195
                            200
                                                 205
Ala Leu Ile Val Leu Phe Gly Ser Leu Leu Val Ala Ile Phe Ala Tyr
                        215
                                             220
Ser Asn Ile Val Val Thr Ile Val Gly Leu Pro Ser Ala Arg Glu Gln
                    230
                                        235
Gln Arg Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val Leu Ser Leu
                245
                                    250
Met Tyr Gly Ser Cys Val Phe Ile Tyr Met Lys Pro Lys Gln Thr Ser
            260
                                265
Arg Leu Asp Thr Asn Arg Glu Ala Ala Leu Val Asn Thr Val Val Thr
        275
                            280
Pro Leu Leu Asn Pro Val Ile Tyr Thr Leu Arg Asn Lys Gln Val His
                        295
Gln Ala Leu Arg Asp Ala Leu Ser Arg Val Lys Leu Pro Arg Phe Gln
                    310
Arg Ser Asn Ala Pro Ser Leu
<210> 2319
<211> 69
<212> PRT
<213> Mus musculus
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<400> 2319

Ser His Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Ile Ile Ser Leu Asn Phe Asn Ser Ser Ser His Ser Thr Gly Arg Asp Met Ala Ala 20 25 Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr 40 Thr Leu Arg Lys Arg Asp Met Lys Arg Gly Leu Ser Lys Val Leu Thr 55 Met Asn Ile His Leu <210> 2320 <211> 310 <212> PRT <213> Mus musculus <400> 2320 Met Gly Lys Glu Asn Gln Thr Trp Val Ser Glu Phe Leu Leu Gly Leu Ser Ser Asp Trp Trp Thr Gln Val Ser Leu Phe Val Leu Phe Leu 20 Ala Met Tyr Leu Leu Thr Val Leu Gly Asn Leu Ile Ile Leu Leu 35 40 Ile Thr Leu Asp Ser Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 60 Ile Leu Ser Phe Val Asp Ile Cys Tyr Thr Asn Ser Thr Val Pro Gln 70 Met Leu Val His Phe Leu Ser Ala Arg Lys Ser Ile Pro Phe His Ser 85 90 Cys Val Met Gln Leu Tyr Ile Ser Leu Ala Met Gly Ser Thr Glu Phe 105 Phe Leu Leu Gly Ala Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Tyr 120 Pro Leu His Tyr Met Val Ile Met His Gly Gly Leu Cys Leu Gly Leu 135 140 Ala Ser Ala Cys Leu Thr Ala Gly Leu Thr Asn Ser Leu Met Gln Thr 150 155 Leu Met Ile Phe His Leu Pro Phe Cys Arg Lys Val Ile Asn His Phe 165 170 Ala Cys Glu Met Leu Ala Val Leu Arg Leu Ser Cys Val Asp Ile Ser 180 185 190 Leu Asn Lys Val Met Val Ala Ile Ser Gly Phe Leu Val Ile Met Leu 195 200 Pro Cys Ile Leu Val Leu Phe Ser Tyr Ala His Ile Val Ala Ala Ile 210 215 220 Leu Arg Ile Arg Ser Ser Gln Gly Arg Lys Ala Phe Gly Thr Cys Ala 230 235 Ser His Leu Thr Val Val Ser Met Cys Phe Gly Thr Ala Ile Phe Thr 245 250 Tyr Met Arg Pro Val Gly Arg Ser Ser Ala Gly Gln Glu Lys Met Val 260 265 270 Ala Leu Phe Tyr Ala Val Val Thr Pro Met Leu Asn Pro Leu Ile Tyr 275 280 285 Ser Leu Arg Asn Asn Asp Val Ile Gly Ala Leu Lys Arg Thr Leu Glu 295 300 Lys Leu Lys Glu Lys Lys

305

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<210> 2321
<211> 288
<212> PRT
. <213> Mus musculus
<220>
<221> VARIANT
<222> (117)...(124)
<223> Any amino acid
<221> VARIANT
<222> (126)...(134)
<223> Any amino acid
<400> 2321
Met Arg Glu Asn Met Thr Trp Val Ser Glu Phe Ile Leu Met Gly Leu
Thr Ser Asp Lys Asn Ile Gln Ala Gly Leu Phe Val Leu Phe Gly Val
            20
Thr Tyr Leu Leu Thr Leu Leu Gly Asn Gly Leu Ile Val Leu Leu Ile
                             40
Ala Leu Asp Pro Arg Leu His Leu Pro Met Tyr Phe Phe Leu Cys His
                         55
Leu Ser Val Val Asp Ile Cys Tyr Thr Ser Ser Gly Val Pro Gln Met
Leu Ala His Phe Leu Met Glu Lys Lys Thr Ile Ser Phe Ala Leu Cys
                85
Gly Thr Gln Leu Phe Phe Ala Leu Thr Leu Gly Gly Thr Glu Phe Leu
            100
                                 105
Leu Leu Ala Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Phe Xaa Xaa Xaa
        115
                             120
Xaa Xaa Xaa Xaa Xaa Thr Ala Val Thr Met Cys Leu Pro Thr Cys
    130
                         135
                                             140
Gly His Asn Val Leu Asn His Val Ala Cys Glu Thr Leu Thr Leu Val
                     150
                                         155
Arg Leu Ala Cys Val Asp Ile Thr Leu Asn Gln Val Val Ile Leu Ala
                                     170
Ser Ser Val Val Leu Met Ile Pro Cys Ser Leu Val Ser Leu Ser
            180
                                 185
 Tyr Ala His Ile Val Ala Ala Ile Met Lys Ile His Ser Thr Gln Gly
                                                 205
        195
                             200
Arg Arg Lys Ala Phe Glu Thr Cys Ala Ser His Leu Thr Val Val Ser
                         215
                                             220
Met Ser Tyr Gly Met Ala Leu Phe Thr Tyr Leu Gln Pro Ala Ser Thr
                     230
                                         235
Ala Ser Ala Glu Gln Asp Lys Val Val Ile Phe Tyr Ala Leu Val
                                     250
Thr Pro Met Met Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val
                                 265
                                                     270
Lys Ala Ala Phe Arg Arg Val Leu Met Lys Asn Ile Glu Ser Lys Asn
                             280
<210> 2322
 <211> 297
 <212> PRT
 <213> Mus musculus
```

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<222> (105)...(111)
<223> Any amino acid
<400> 2322
Met Gly Lys Asp Asn Gln Thr Trp Ile His Glu Phe Ile Leu Leu Gly
Leu Ser Ser Asp Trp Asn Thr Glu Val Ser Leu Phe Val Leu Phe Leu
            20
Leu Met Tyr Leu Val Thr Val Leu Gly Asn Phe Leu Ile Ile Val Leu
                            40
Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                        55
                                             60
Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Ile Val Pro Gln
                    70
Leu Leu Ala His Phe Leu Ala Thr His Lys Thr Ile Pro Phe Leu Ser
                                    90
Cys Ala Ala Gln Leu Phe Phe Ser Xaa Xaa Xaa Xaa Xaa Xaa Tyr
                                105
Ser Ala Ile Met His Thr Gly Leu Cys Ser Arg Met Ala Ile Val Ser
                            120
Trp Val Gly Gly Ser Ile Asn Ser Val Met Gln Thr Ala Ile Thr Phe
                        135
Gln Leu Pro Met Cys Thr Asn Val Tyr Ile Asp His Ile Ser Cys Glu
                    150
                                         155
Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr Ser Ala Asn Glu
                                    170
Val Ala Ile Met Val Ser Ser Ile Ile Leu Leu Met Thr Pro Phe Cys
                                185
Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys Ile
                            200
Gln Ser Lys Glu Gly Arg Lys Lys Ala Phe His Thr Cys Ala Ser His
                        215
                                             220
Leu Thr Val Val Ala Leu Cys Tyr Gly Met Ala Ile Phe Thr Tyr Ile
                    230
                                         235
Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys Leu Ile Ser Leu
                245
                                    250
Phe Tyr Ala Ile Leu Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu
                                265
                                                     270
Arg Asn Lys Glu Val Lys Gly Ala Trp Gln Lys Leu Leu Gly Gln Phe
                            280
Ser Glu Phe Thr Ser Lys Leu Lys Thr
    290
                        295
<210> 2323
<211> 145
<212> PRT
<213> Mus musculus
<400> 2323
Met Val Met Ser Ala Arg Asn Asn Pro Asp Leu Thr Pro Ala Ser Phe
                                    10
Val Leu Asn Gly Ile Pro Gly Leu Glu His Met His Ile Trp Ile Ser
            20
                                25
Phe Pro Phe Cys Ser Met Tyr Ala Val Ala Met Met Gly Asn Cys Gly
Leu Leu Tyr Leu Ile Phe Phe Glu Asp Ser Leu His Arg Pro Met Tyr
```

<220>

<221> VARIANT

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Tyr Phe Leu Ala Met Leu Ser Leu Thr Asp Leu Val Met Cys Ser Ser
                    70
                                        75
                                                             80
Thr Ile Pro Lys Ala Leu Cys Ile Phe Trp Phe His Leu Lys Glu Ile
                                    90
Gly Phe Asp Asp Cys Leu Val Gln Met Phe Phe Ile His Thr Phe Met
            100
                                105
Gly Met Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp His Tyr Val
                            120
                                                125
Ala Ile Cys Tyr Pro Leu His Tyr Ser Thr Ile Leu Thr Asn Pro Ile
                        135
                                            140
Ile
145
<210> 2324
<211> 215
<212> PRT
<213> Mus musculus
<400> 2324
Leu Lys Lys Asn His Ile Arg Val Thr Lys Pro Ile Leu Leu Gly Phe
                                    10
Thr Asn Asn Ser Glu Ile Gln Ile Ser Leu Phe Val Phe Phe Leu Ala
            20
Ile Tyr Leu Val Ala Leu Leu Gly Asn Phe Leu Ala Phe Thr Ile Asn
                            40
Arg Val Asp Pro Thr Leu Gln Thr His Lys Tyr Phe Tyr Leu Gln Asn
                        55
Leu Ser Gln Leu Glu Val Cys Phe Thr Leu Val Met Ile Pro Lys Met
                    70
Leu Val Asp Leu Arg Lys Val Ile Ser Phe Trp Gly Cys Gly Ile Arg
                                    90
Val Cys Ser Phe Phe Phe Pro Pro Ser Ile Ser Ser Ser Ser Ala
                                105
Leu Met Met Ala Leu Pro Phe Ser Val Cys Val Cys Met Cys Val Cys
                            120
Val Asp Leu Val Thr Asp Ala Ser Ala Cys Ile Leu Phe Ser Ser Ser
                        135
                                            140
Cys Phe Thr Phe Ile Ile Val Ser Tyr Val His Ile Ala Gly Thr Thr
                    150
                                        155
Leu Arg Met Ser Phe Ala Thr Asp Gly Gln Lys Ala Phe Phe Ile Cys
                                    170
Leu Leu Tyr Leu Thr Val Ile Tyr Tyr Phe Tyr Val Thr Ala Asn Leu
            180
                                185
Thr Tyr Arg Thr Ser Ser Asn Ser Ser Glu Ser Ser Ser Leu Ser Tyr
        195
                            200
                                                205
Thr Val Phe Met Ser Met Leu
   210
<210> 2325
<211> 216
<212> PRT
<213> Mus musculus
<400> 2325
Ile Lys Ala Lys Ile Glu Glu Glu Asn Thr Thr Glu Ile Thr Gln Phe
                5
                                    10
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Ile Cys Leu Gly Phe Ser Asp Ser Pro Glu Ile Thr Glu Leu Leu Phe
                                25
Val Leu Ile His Thr Trp Asn Met Ser Phe Ile Val Leu Ile Arg Met
                            40
Asp Ser His Leu His Thr Pro Ser Ile Ser Phe Lys Glu Ile Tyr Tyr
                        55
Ile Ser Ser Ala Ile Glu Ser Met Leu Ser Lys Phe Phe Gln Glu Lys
                                        75
Gln Thr Ile Ser Phe Val Gly Tyr Met Val Tyr Phe Ile Phe Phe Thr
               85
                                    90
Arg Val Leu Ser Glu Ser Phe Leu Val Thr Ala Met Ala Tyr Asp Lys
                                                    110
           100
                                105
Tyr Ala Ile Ile Cys Asn Pro Thr Ala Leu Ser Pro Ile Met Leu Pro
                            120
       115
                                                125
Thr Leu Cys Ala Trp Val Met Val Glu Ser Tyr Val Thr Thr Asn Ser
                        135
                                            140
Ser Ser Leu Pro Gln Ile Cys Thr Leu Leu Gln Leu Tyr Phe Cys Gly
                   150
                                        155
Leu Asn Ile Asn Arg Arg Phe Phe Cys Asp Met Pro Gln Leu Leu Asn
               165
                                    170
Leu Ser Tyr Thr Asp Lys Phe Phe Val Gln Phe Leu Leu Ala Ile Phe
           180
                                185
                                                    190
Thr Arg Leu Phe Arg Ile Val Asn Ala Leu Leu Ile Ser Ile Ala Tyr
                            200
       195
Asp Tyr Val Ala Ile Ser Val Val
   210
```

<210> 2326

<211> 315

<212> PRT

<213> Mus musculus

<400> 2326

Met Glu Gly Met Ala Ala Arg Asn His Cys Val Val Thr Glu Phe Phe 10 Leu Ala Gly Leu Ser Asn Lys Gln Glu Leu Gln Leu Pro Leu Phe Leu 25 Leu Phe Ile Arg Phe Tyr Val Val Thr Val Thr Gly Asn Leu Ser Ile 40 Ile Thr Leu Ile Gly Leu Asn Ser His Leu Pro Thr Pro Met Tyr Tyr 55 Phe Leu Ser Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Val 70 75 Thr Pro Lys Met Pro Val Asn Phe Met Val Glu Lys Asn Ile Ile Ile 85 90 Ser Tyr Leu Gly Cys Met Thr Gln Leu Tyr Cys Phe Leu Ile Phe Gly 100 105 110 Ile Ala Glu Gly Tyr Thr Leu Ala Ala Met Ala Tyr Asp Pro Phe Val 120 125 Ala Ile Cys Asn Pro Leu Leu Tyr Asn Ala Thr Met Ser Ser Gln Ile 135 140 Tyr Thr Ser Leu Ile Phe Ser Val Tyr Ile Phe Ala Val Phe Cys Ile 150 155 Ser Thr His Val Gly Phe Met Phe Arg Ile Lys Phe Cys Lys Leu Asp 165 170 Val Ile Asn His Tyr Phe Cys Asp Leu Leu Pro Leu Leu Lys Arg Ala Cys Ser Asp Thr Tyr Ile Asn Glu Met Leu Ile Gln Tyr Phe Gly Thr

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200
Thr Asn Ile Cys Ile Gln Ile Leu Thr Ile Phe Thr Ser Tyr Ile Phe
                        215
Ile Ile Ala Ser Ile Leu Cys Ile His Ser Thr Glu Ser Arg Ser Lys
                                        235
                    230
Ala Phe Ser Thr Cys Ser Ser His Ile Leu Ala Val Ala Val Phe Phe
                245
                                    250
Gly Ser Leu Ala Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Phe Met
                                265
Asp Gln Gly Lys Val Phe Ser Val Phe Tyr Thr Ile Val Val Pro Met
                            280
Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Ala Asn Val Ala
                        295
                                           300
Leu Lys Lys Ile Phe Glu Arg Lys Arg Phe Ile
<210> 2327
<211> 277
<212> PRT
<213> Mus musculus
<400> 2327
Met Asp Thr Gly Asn His Ser Ala Val Thr Leu Phe Val Leu Val Gly
Leu Thr Gln Gln Pro Glu Leu Leu Pro Leu Phe Ile Leu Phe Leu
Gly Ile Tyr Val Val Thr Ala Val Gly Asn Met Gly Met Ile Leu Leu
        35
                            40
Ile Thr Val Ser Pro Leu Leu Tyr Thr Pro Met Tyr Tyr Phe Leu Ser
                     55
Ser Leu Ser Cys Val Asp Leu Tyr Tyr Ser Thr Ile Ile Thr Pro Lys
                    70
                                        75
Met Leu Val Asn Phe Leu Gly Lys Lys Ile Leu Ile Ile Tyr Ser Lys
Cys Met Ala Gln Pro Phe Leu Phe Val Val Phe Val Val Ala Glu Gly
            100
                                105
Tyr Leu Leu Thr Val Met Ala Tyr Asp Leu Tyr Val Ala Ile Cys Arg
                            120
Pro Leu Leu Tyr Asn Val Ile Met Ser Ser Lys His Cys Leu Leu Leu
                        135
Val Leu Val Ser Phe Ile Leu Asp Ile Phe Phe Ser Ala Leu Thr His
                    150
                                        155
Thr Ser Ala Met Met Asn Leu Ser Phe Cys Lys Ser His Ile Ile Gly
                                    170
His Ser Phe Cys Asp Val Leu Pro Phe Ala Ser Leu Ser Cys Ser Asn
            180
                                185
                                                    190
Thr Arg Phe Asn Lys Leu Leu Phe Ile Ile Gly Gly Ile Asn Thr Leu
                            200
Val Thr Thr Leu Ala Val Ala Ile Ser Tyr Val Phe Ile Leu Cys Ser
                        215
Ile Leu Tyr Ile Ser Ser Leu Lys Gly Arg Ser Lys Ala Leu Gly Asp
                    230
                                        235
Cys Ser Ser His Val Met Ala Val Gly Ile Phe Phe Gly Ser Ile Thr
                                    250
Phe Ile Tyr Phe Lys Ser Ser Lys Ile Leu Ile Phe Tyr Tyr Phe Ile
                                265
                                                    270
Asn Ile Leu Phe Tyr
        275
```

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<210> 2328
<211> 183
<212> PRT
<213> Mus musculus
<400> 2328
Pro Leu Leu Tyr Ser Ser Ile Met Ser Gln His Lys Cys Leu Ser Leu
Val Leu Val Val Tyr Ile Ile Gly Ile Ile Cys Ala Ser Ala His Val
Gly Cys Ile Phe Arg Val Asp Phe Cys Arg Phe Asp Val Ile Asn His
Cys Phe Cys Asp Leu Ile Ser Ile Leu Lys Leu Ser Cys Ser Asn Ile
                        55
Phe Val Asn Glu Leu Leu Ile Leu Ile Phe Ser Leu Ile Asn Thr Ile
                    70
Phe Pro Thr Leu Thr Ile Leu Ile Ser Tyr Thr Phe Ile Ile Ser
                                    90
Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr
           100
                                105
Cys Ser Ser Leu Ile Ser Ala Val Ala Val Phe Phe Gly Ser Ala Ala
                            120
                                                125
Phe Met Tyr Leu Lys Pro Ser Ser Ser Ser Ser Ile Asn Glu Gly Lys
                        135
Ile Cys Ser Ile Phe Tyr Thr Ile Phe Val Pro Met Leu Asn Pro Leu
                    150
                                        155
Ile Tyr Ser Leu Arg Asn Lys Asp Val Asn Ile Ala Val Lys Lys Ile
               165
                                    170
Ile Glu Arg Arg Ser Phe Phe
            180
<210> 2329
<211> 307
<212> PRT
<213> Mus musculus
<400> 2329
Phe Ile Lys Gln Arg Lys Ile Glu Val Gly Asn Cys Ser Thr Thr Glu
Phe Leu Leu Gly Ile Thr Asn Lys Pro Lys Ile Lys Val Ile Leu
                                25
Phe Asn Ser Phe Leu Val Tyr Leu Ile Ile Leu Phe Glu Asn Leu Gly
Met Ile Ile Leu Ile Arg Met Asn Thr Lys Leu His Thr Leu Met Tyr
Tyr Phe Leu Ser Gln Leu Ser Phe Ser Asp Ile Ser Tyr Ser Thr Ala
                                        75
                    70
Phe Gly Pro Lys Met Met Asn Ser Leu Gln Leu Pro Cys Ile Cys Ser
                                    90
Val Phe Phe Ile Ser Asn Ile Phe Thr Asp Ala Glu Cys Ile Met Leu
                                105
                                                    110
Ala Val Met Thr Leu Asp Arg Tyr Asn Ala Ile Ser Asn Pro Leu Met
                            120
                                                125
Tyr Ala Ala Asp Met Ser Gln Val Val Cys Ser Arg Leu Leu Ala Val
```

Val Tyr Leu Phe Gly Met Val Asp Ala Leu Ile His Thr Ile Leu Thr

```
150
145
                                        155
Phe His Leu Cys Phe Cys Gly Phe Lys Glu Ile Asn His Phe Phe Cys
                                    170
Asp Ile Pro Pro Leu Leu Ser Leu Phe Ser Ser Asp Ile Glu Val Asn
                                185
Glu Leu Asp Ile Phe Ile Leu Cys Glu Phe Thr Lys Met Ser Thr Ile
        195
                            200
                                                205
Ser Val Leu Val Phe Tyr Cys Tyr Ile Ile Ser Leu Val Leu Lys Ile
                        215
Cys Ser Ala Glu Gly Arg Phe Lys Ala Val Ser Thr Cys Thr Ser His
                    230
                                        235
Pro Thr Thr Ala Val Ala Ile Phe Gln Gly Met Met Ser Ile Met Tyr
                                    250
Phe Gln Pro Ser Ser Ala Tyr Ser Leu His Gln Asp Lys Met Thr Ser
            260
Leu Phe Tyr Thr Leu Val Ile Phe Met Leu Asn Ala Val Ile Tyr Ser
                            280
Leu Arg Asn Glu Asp Val Lys Ala Ser Val Lys Ser Leu Lys Ser Arg
                                            300
Ile Ser Asp
305
<210> 2330
<211> 349
<212> PRT
<213> Mus musculus
<400> 2330
Met Glu Met Glu Asn Val Thr Leu Leu Thr Val Phe Leu Ile Glu His
Gln Pro Gln Trp Lys Leu Pro Leu Phe Leu Ser Leu Phe Val Ile Asn
Leu Ile Ser Asn Ala Trp Tyr Phe Ser Leu Ile Asn Phe Trp Asp Asp
Thr His Phe His Ile Pro Met Tyr Leu Phe Leu Ser Asn Ser Pro Phe
                        55
Val Asn Ser Trp Leu Pro Ser Glu Leu Leu Ile Thr Phe Ser Leu Ser
Leu Ser Val Ser Pro Ser Val Ser Val Ser Val Ser Leu Ser Val Ser
                                    90
Val Ser Pro Cys Leu Phe Leu Ser Leu Ser Val Cys Leu Ser Leu Ser
                                105
            100
Leu Ser Val Ser Leu Cys Leu Ser Leu Ser Leu Thr Leu Ser Leu Ser
                            120
Leu Cys Leu Ser Leu Ser Leu Ser Leu Ser Leu Ser Leu Ser
                        135
                                            140
Val Ser Leu Ser Pro Ser Leu Arg Pro Ile Cys Cys Phe Pro Phe Ser
                                        155
                    150
Val Ser Val Lys Cys Phe Phe Thr Pro Arg Ala Arg Asp Cys Tyr Ile
                                    170
                                                        175
Ala Ile Cys Lys Pro Leu Leu Tyr Pro Ile Ile Met Thr Asn Ser Gln
            180
                                185
                                                    190
Cys Phe His Leu Glu Ile Phe Ser Pro Glu Gly Gly Phe Leu His Val
                            200
Leu Thr Tyr Glu Ile Phe Leu Phe Arg Ile Thr Phe Cys Asn Ser Asn
                        215
                                            220
Val Ile Tyr His Phe Tyr Cys Asp Val Ile Phe Phe Phe Phe Lys
                    230
                                        235
```

```
Ile Ser Cys Ser Asp Ser Ser Ile Ser Phe Leu Leu Met Phe Gly Leu
                                    250
                245
Ala Asp Thr Gly Trp Arg Ser Thr Ile Val Ser Val Leu Gly Phe Tyr
                                                    270
            260
                                265
Ile Ile Leu Phe Thr Leu Leu Leu Ser Lys Cys Phe Lys Gly Ile Lys
                            280
Lys Ala Phe Ser Thr Cys Gly Ala His Val Leu Cys Ala Ser Leu Tyr
                        295
                                            300
Tyr Gly Pro Leu Phe Met Tyr Val Arg Leu Ala Ser Arg Tyr Ala Asp
                    310
                                        315
Ala Glu Ile Asp Ser Leu Phe Tyr Thr Val Ile Val Thr Met Leu Asn
               325
                                    330
Ile Ile Ile Tyr Ser Ile Lys Lys Gln Ile Ile Asp Ser
```

<210> 2331 <211> 298 <212> PRT <213> Mus musculus

<400> 2331 Met Glu His Ser Asn Asp Ser Lys Val Thr Glu Phe Ile Leu Leu Gly 10 Phe Ala Gly Gln Asn Glu Ser Trp His Ile Leu Phe Ala Val Phe Leu 25 20 Val Ile Tyr Val Ala Thr Leu Val Gly Asn Ile Gly Met Ile Leu Leu 40 Ile Lys Leu His Ser Ser Leu His Thr Pro Met Tyr Phe Phe Leu Gln 55 His Leu Ala Phe Val Asp Leu Cys Tyr Ser Tyr Ala Ile Thr Pro Ser 75 70 Asp Thr Gly Ala Leu Gln Asn Phe Met Ser Thr Arg Pro Ser Phe Pro 90 85 Phe Thr Gly Trp Thr Met Gln Leu Tyr Ile Tyr Gly Ile Phe Ile Asn 100 105 110 Ser Asp Phe Ile Leu Ala Ala Arg Ala Val Asp Ser Tyr Val Ala Ile 115 120 Cys Asn Pro Leu His Cys Pro Ile Ile Met Ser Gln Arg Trp His Ser 135 140 Gly Ala Ser Val Asn Thr Gly Phe Thr Phe Tyr Asn Phe Cys Arg Ser 150 155 Asn Ala Ile Asn His Phe Phe Cys Asn Val Pro Pro Ile Leu Thr Pro 170 165 Ser Cys Ser Ser Thr Asp Phe Asn Ile Val Leu Leu Thr Val Phe Val 180 185 Gly Phe Asn Phe Ile Phe Ser Val Ser Val Val Ile Leu Ser Tyr Thr 195 200 His Ile Leu Ala Ala Ile Leu Arg Met Phe Ser Ala Ala Gly Arg Ile 215 220 Lys Ala Phe Ser Thr Cys Val Thr His Val Thr Thr Ile Thr Ile Leu 230 235 Phe Arg Thr Val Cys Tyr Met Tyr Val Leu His Gly Ile Asn Arg Ser 245 250 Gln Glu Gln Lys Lys Val Thr Tyr Val Ser Tyr Phe Ile Ile Pro 260 265 Met Leu Asn Leu Leu Val Cys Ser Val Arg Asn Gln Asp Met Ile Glu 280 285

Val Leu Arg His Ile Glu Asn Lys Cys Leu

```
<210> 2332
<211> 194
<212> PRT
<213> Mus musculus
<400> 2332
Tyr Asp Arg Tyr Leu Ala Ile Cys Gln Pro Leu Trp Arg Tyr Pro Val
Leu Met Ser Ala Lys Leu Ser Thr Leu Leu Val Ala Gly Ala Trp Val
                                25
Ala Gly Leu Ile His Gly Ala Ile Gln Ala Ile Leu Thr Phe Arg Leu
Pro Tyr Cys Gly Pro Asn Gln Val Asp Tyr Phe Phe Cys Asp Ile Pro
Ala Val Leu Lys Leu Ala Cys Ala Asp Thr Thr Val Asn Glu Leu Phe
                                        75
Thr Phe Val Asp Ile Gly Val Val Val Ala Ser Cys Phe Ser Leu Ile
Leu Leu Ser Tyr Ile Tyr Ile Ile Arg Ala Ile Leu Arg Ile Arg Thr
            100
                                105
Ala Asp Gly Arg Arg Ala Phe Ser Thr Cys Gly Ala His Val Thr
        115
                            120
                                                125
Met Val Thr Val Tyr Tyr Val Pro Cys Ala Phe Thr Tyr Leu Arg Pro
                        135
                                            140
Asp Ser His Gly Ile Leu Asp Gly Ala Ala Leu Phe Pro Thr Ala
                    150
                                        155
Ile Thr Pro Phe Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Gln Glu
                165
                                    170
Val Lys Leu Ala Leu Arg Arg Met Val Gly Ser Gln Ser Thr Lys Ser
Gly Gly
<210> 2333
<211> 310
<212> PRT
<213> Mus musculus
<400> 2333
Val Asn Ile Ser Leu Val Thr Glu Phe Ile Val Val Gly Ala Glu Gln
                 5
Pro Asp Leu Gln Ile Pro Met Phe Phe Gly Phe Leu Ala Met Tyr Pro
Val Thr Ala Leu Glu Asn Leu Phe Leu Ile Ile Leu Thr Val Leu Asn
Ser His Val His Thr Thr Met Tyr Phe Phe Leu Phe Asn Leu Ser Phe
Val Val Leu Cys Tyr Ser Ser Val Phe Thr Pro Gln Met Leu Met Asn
                    70
Phe Ile Ile Arg Lys Asn Thr Ile Ser Tyr Met Glu Cys Ile Thr Leu
                85
                                    90
Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser
                                105
Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Glu Cys Cys Val Leu
```

120

```
Thr Ser Met Ala Tyr Asp Ser Ile Cys Asn Pro Leu Leu Tyr Asn Leu
                       135
                                            140
Phe Met Ser Pro Lys Cys Leu Asn Leu Ile Leu Gly Ser Phe Phe Ile
                   150
                                       155
Ser Phe Ser Asp Ala Val Ala His Ser Thr Cys Arg Leu Lys Leu Thr
               165
                                   170
Phe Cys Asp Cys Asp Ile Pro Pro Leu Leu Gln Leu Cys Cys Thr Ser
           180
                               185
Thr Tyr Val Asn Glu Leu Val Ile Phe Val Phe Leu Val Gly Cys Ile
                           200
Asn Ile Ile Val Pro Ser Ser Thr Ile Leu Ile Ser Tyr Asp Phe Ile
                                            220
                       215
Leu Ser Ser Met Phe Cys Ile Lys Ser Ser Glu Gly Arg Ser Lys Ala
                   230
                                       235
Phe Ser Thr Tyr Ser Ser His Val Ile Ser Leu Ser Leu Phe Phe Asp
               245
                                    250
Ser Ser Ala Phe Val Tyr Phe Lys Ser Ser Ser Ala Gly Ser Leu Gly
                                265
           260
Glu Glu Asn Ile Ser Ser Val Phe Tyr Ser Asn Val Val Leu Ile Val
                           280
                                               285
Asn Pro Leu Leu Tyr Ser Leu Arg Asn Lys Asp Ser Leu Arg Lys Thr
                      295
Leu Thr Arg Lys Asn Phe
```

<210> 2334

<211> 320

<212> PRT

<213> Mus musculus

<400> 2334

Ser Glu Pro Asn Trp Thr Val Pro Gln Glu Phe Val Ile Leu Gly Phe Ser Gly Trp Pro Gln Gly Leu Arg Val Leu Leu Phe Ser Leu Leu Leu Pro Leu Tyr Leu Ala Thr Leu Ala Gly Asn Leu Leu Ile Leu Gly Leu Ala Leu Ala Glu Pro Thr Leu His Thr Pro Met Tyr Phe Phe Leu Gly Ser Leu Ser Ala Val Glu Val Ala Tyr Thr Leu Val Leu Thr Pro Arg Met Leu Ala Gly Phe Leu Leu Pro Pro Gly Gly Gln Ala Val Ala Pro Ser Thr Cys Ala Ala Gln Met Gly Leu Phe Val Ala Leu Gly Gly Ser Glu Cys Leu Leu Ala Ala Met Ala Leu Asp Arg Tyr Leu Ala Ile Cys Arg Pro Leu Tyr Tyr Pro Leu Met Thr Ser Gly Leu Cys Trp Ala Leu Leu Ala Cys Cys Cys Leu Gly Gly Ser Ile Leu Ala Leu Gly Leu Thr Met Ala Ile Phe Gln Leu Pro Phe Cys His Gly Gly Leu Val Asn His Val Phe Cys Asp Leu Pro Ala Val Leu Val Leu Ala Cys Gly Asn Arg Glu Leu Gln Glu His Val Leu Leu Ala Ala Cys Met Leu Leu Val Leu Pro Leu Ile Leu Ile Leu Leu Ser Tyr Thr Arg Val Leu Val

```
210
                        215
                                            220
Val Ile Leu Gly Val Gly Asp Ser Ala Gly Arg Arg Lys Ala Phe Asn
                    230
                                        235
Thr Val Ala Ser His Leu Thr Val Ala Val Leu His Tyr Gly Cys Ala
                                                         255
                245
                                    250
Thr Ala Met Tyr Ala Arg Pro Leu Ser Ser Arg Ser Leu Glu Glu Asp
            260
                                265
Lys Leu Val Ser Leu Ile Tyr Ile Asn Leu Thr Pro Leu Leu Tyr Pro
                            280
Ala Ile Tyr Thr Leu Arg Asn Arg Asp Met Gln Gly Ala Leu Gln Arg
                                            300
                        295
Val Val Ser Gln Arg Thr Met Gly Thr Val Gln Gln Ala Asp Leu Val
<210> 2335
<211> 234
<212> PRT
<213> Mus musculus
<400> 2335
Met Glu Gln Asn Val Ser Tyr Ser Arg Val Lys Glu Phe Val Cys Glu
                                    10
Gly Leu Thr Asp Ser Ser Pro Lys Ser Val Trp Ser Ser Phe Leu Phe
                                25
Leu Val Tyr Thr Ala Thr Gly Leu Gly Ser Leu Leu Ile Met Val Thr
        35
                            40
Ala Thr Glu Cys Leu Leu His Thr Pro Ile Phe Ser Leu Ser Val Met
                        55
Thr Phe Asp Gln Tyr Met Ala Ile Ser Lys Pro Leu Gln Tyr Val Ser
                                        75
Ile Met Ser Ser Arg Arg Cys Gln Ala His Ile Val Ala Ser Trp Val
                                                         95
                                    90
Gly Asn Phe Val His Ser Ile Val Gln Ile Ser Leu Leu Leu Pro Leu
Pro Phe Phe Gly Pro Asn Val Val Asp Gly Phe Tyr Cys Asp Val Pro
                                                125
                            120
Gln Ala Leu Lys Leu Thr Cys Thr Ser Thr Phe Ala Leu Glu Val Leu
                        135
                                            140
Met Ile Ala Thr Asn Gly Leu Ile Thr Thr Met Trp Phe Val Phe Leu
                    150
                                        155
Leu Val Thr Tyr Leu Ala Thr Leu Met Val Ile His Arg Arg Lys Val
                                    170
                                                        175
Ile Ser Ser Cys Thr Gln Ile Thr Val Val Thr Leu His Phe Val Thr
            180
                                185
Cys Ile Tyr Val Phe Thr Ala Leu Pro Met Asp Arg Ala Val Ser Ile
        195
                            200
Thr Phe Thr Val Ile Ile Pro Val Leu Asn Pro Met Ile Cys Thr Leu
                        215
Met Ser Ser Gly Phe Leu Ser Leu His Lys
                    230
<210> 2336
<211> 146
<212> PRT
<213> Mus musculus
```

<400> 2336

```
Tyr Glu Lys Lys Tyr Thr Glu Met Thr Gln Phe Ile Leu Leu Gly Phe
Ser Asp Phe His Gln Ile Thr Ala Leu Gln Phe Ile Ile Phe Leu Thr
Asn Leu Cys Leu Ile Val Leu Ile Arg Met Asn Ser His Leu His Thr
        35
Ser Met Val Phe Leu Cys Asp Leu Ser Leu Ile Gly Leu Tyr Tyr Ile
                        55
Asn Ser Met Asp Pro Lys Ile Leu Thr Pro Ile Tyr Ser Ser Arg Ser
                    70
Lys Gly Ser Arg Ala Thr Phe Trp Pro Pro Gln Ala Cys Thr Trp Cys
                                    90
Ile Cys Ile His Thr Gly Lys Asn Ser Tyr Thr Asn Lys Phe Phe Lys
Ser Cys Arg Lys Glu Ser His Phe Leu Ala Met Thr Gln Glu Thr Lys
                            120
Leu Phe Met Leu Leu Val Tyr Ile Pro Gly Val Lys Phe Tyr Leu Ser
                        135
Ser Ile
145
<210> 2337
<211> 245
<212> PRT
<213> Mus musculus
<400> 2337
Gly His Arg Lys Phe Ser Leu Asn Glu Phe Ile Phe Ala Gly Phe Ala
Asn Asn Pro Glu Met Lys Gly Ile Phe Val Met Phe Leu Val Ile Tyr
Leu Ile Asn Leu Leu Gln Thr Val Gly Met Ile Ile Leu Met Arg Met
Asp Pro Gln Leu His Thr Ser Lys Tyr Phe Tyr Leu Ser His Leu Ser
                        55
Phe Ser Asp Phe Tyr Tyr Phe Ile Ala Ile Val Leu Lys Val Ser Val
                    70
Gly Ile Phe Gly Asn Lys Ile Cys Leu Arg Gly Cys Ala Leu Phe Phe
                85
                                    90
Thr Ser Cys Thr Phe Ala Asp Glu Tyr Ile Val Leu Ala Ala Met Ser
            100
                                105
Phe Val Arg Tyr Gln Ala Ile Ser His Ser Cys Leu His Thr Thr Gln
        115
                            120
Ala Gln Gln Cys Gly Tyr Leu Thr Ala Asp Ile Tyr Leu Val Arg Thr
                        135
                                            140
Leu Asp Ala Leu Lys His Phe Pro Leu Ala Phe His Leu Cys Ile Ser
                    150
                                        155
Glu Ser Asn Glu Ile Asn His Phe Phe Cys Asn Leu Cys Val Leu Tyr
                165
                                    170
Leu Leu Ser Cys Ser Asp Thr Gln Leu Phe Asn Ile Tyr Asp Leu Phe
           180
                                185
                                                    190
Val Leu Ser Thr Leu Ala Ser Ile Leu Ile Cys Tyr Cys Tyr Thr Ile
                            200
                                                205
Ser Val Leu Glu Met His Phe Ser Glu Trp Arg Phe Lys Ser Phe Ser
                        215
                                            220
Val Cys Thr Leu Cys Leu Ile Ala Phe Ala Asn Phe Gln Ile Thr Leu
```

Ile Phe Ile Tyr Tyr

```
<210> 2338
<211> 218
<212> PRT
<213> Mus musculus
<400> 2338
Lys Pro Pro Ile Lys Thr Phe Arg Lys Lys Ser Asn Gln Ala Lys Arg
                                    10
1
Cys Val Leu Phe Ser Glu Phe Pro Asp Phe Gln Trp Phe Leu Ile Gly
                                25
Leu Leu Phe Ile Thr Tyr Ser Phe Ile Leu Leu Gly Asn Asp Thr Ile
                            40
Val Leu Ile Thr Arg Val Val Phe Ser Phe Gly Lys Phe Ser Phe Leu
                        55
Glu Ile Trp Tyr Ile Tyr Ile Thr Leu Pro Arg Met Val Phe Gly Thr
                    70
                                        75
Gln Lys Arg Ala Met Ser Phe Ile Ala Cys Ala Thr Lys Leu Cys Phe
                                    90
Thr Pro Thr Leu Gly Ala Thr Lys Gly Phe Leu Leu Ala Val Met Tyr
            100
                                105
                                                     110
Asn Asp Ile Tyr Val Ala Val Gly Asn Pro Leu Leu Tyr Ser Leu Leu
                            120
                                                 125
Leu Arg Leu Thr Cys Gly Ser Gln Leu Ser Ala Gly Ser Trp Phe Ser
                        135
                                            140
Gly Met Asn Ser Gly Thr Gly Arg Leu Gln Thr Thr His Lys Phe Ile
                    150
                                        155
Ser Leu Ala Gly Ser His His Thr Asn His Ile Phe Cys Asp Ile Pro
                                    170
                165
Tyr Phe Ser Leu Pro Val Lys Thr Phe Ile Asn Glu Met Val Ile Phe
            180
                                185
                                                    190
Leu Asp Ala Val Leu Phe Cys Ser Ser Phe Leu Leu Leu Ile Ile
                            200
Tyr Tyr Lys Ile Leu Thr Leu Leu Ser Lys
    210
<210> 2339
<211> 100
<212> PRT
<213> Mus musculus
<400> 2339
Pro Ser Ala Glu Leu Thr Ser Arg Gly Arg Gln Ser Thr Trp Ser Glu
                                    10
Glu Pro Pro Ser Ala His Ala Gln Ile Ile Cys Leu Pro Leu Arg Thr
Gln Leu Ser Ala Pro Ser Cys Asn Gly Glu Cys Gly Arg Gly Ser Gln
                            40
His Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr Thr Leu
                        55
Arg Asn Lys Gln Val Lys Glu Ala Phe Lys His Val Leu His Arg Phe
                    70
                                        75
Cys Phe Leu Gln Asn Asn Glu Thr Met Phe Arg His Ala Val Glu Thr
                                    90
Ser Gly Val Lys
            100
```

```
<211> 273
<212> PRT
<213> Mus musculus
<400> 2340
Pro Thr Met Leu Phe Ser Tyr Ile Cys Thr Tyr Ser Ala Gly Glu Glu
Arg Leu Phe Thr Pro Leu Glu Leu Ile Gly His Met Val Ser Ser Phe
Leu Val Leu Ser Cys Tyr Gln Asn Val Ile Thr Leu Leu Met Met Met
Ser Phe Val Gln Asp Asn Asp Val Thr Pro Ser Leu Asn Met Thr Leu
                        55
Leu Ser Ser Phe Leu Ile Phe Val Thr Tyr Val Asn Trp Trp His Ala
                    70
                                        75
Thr Met Ala Tyr Asp His Tyr Ala Val Thr Ser Asn Cys Leu Val Asn
                85
                                    90
Asn Val Ile Met Ser Gln Val Cys Phe Trp Met Val Ser Glu Met His
            100
                                105
Ala Met Gly Phe Thr Glu Asp Thr Ile Gln Thr Leu Cys Ile Leu Arq
        115
                            120
Val Leu Leu Cys Lys Gly Lys Val Met Asn Asn Cys Phe Cys Asp Leu
                        135
                                            140
Leu Pro Leu Pro Leu Ala Tyr Ser Ser Thr Phe Val Asn Lys Ile
                    150
                                        155
Val Leu Leu Tyr Asn Ser Ala Phe Asn Met Phe Gln Pro Arg Leu Thr
                                    170
Ile Ala Pro Tyr Thr Phe Asn Ile Thr Cys Ile Leu Cys Ile Lys Ser
            180
                                185
Thr Asn Gly Arg Val Asn Ala Phe Ser Ser Tyr Asn Ser His Phe Phe
        195
                            200
Ala Val Val Phe Leu Gly Ser Leu Ala Phe Ile Tyr Phe Gln Pro
                        215
Phe Ile Cys Ser Lys Lys Lys Asn Lys Ala Ser Ser Leu Phe Tyr Thr
                    230
                                        235
Thr Ile Val Ser Met Leu Asn Ser Leu Ile Tyr Gly Leu Arg Asn Lys
                245
                                    250
Tyr Val Lys Phe Thr Leu Arg Lys Val Val Lys Lys Gln Asn Leu His
            260
                                265
Val
<210> 2341
<211> 231
<212> PRT
<213> Mus musculus
<400> 2341
Val Val Leu Leu Ile Leu Val Lys Asn Ile Ile Ser Lys Ser Phe Ile
1
                                    10
Ile Thr Ile Ser Ser Gln Leu His Ser Pro Val Tyr Ser Leu Ser His
            20
                                25
Leu Ser Phe Ile Asn Phe Cys Tyr Ser Ser Val Ile Ile Pro Lys Met
Leu Val Asn Phe Val Cys Glu Lys Asp Met Ile Phe Leu Glu Cys Met
```

<210> 2340

```
55
Ile Gln Leu Tyr Phe Ile Ile Phe Val Ile Ala Gly Gly Ser Leu Leu
Thr Ala Thr Thr Tyr Asp Cys Gln Gly Pro Ala Ser Ala Gln Asp Gln
                85
Ser Ser Lys Leu Glu Ala Gly Ile Pro Gly Arg Arg Ile Thr Asn Thr
           100
                                105
His Arg His Leu Phe Gln Glu Gln Ser Leu Arg Gln Val Ser Arg Leu
                            120
       115
Glu Val Ala Leu His Leu Phe Cys Val Ser Leu Ser Leu Ser Leu Ser
                        135
                                            140
Leu Ser Ser Val Ser Val Cys Thr Tyr Ser Ser Leu Ser Cys
                    150
                                        155
Thr Leu Cys Phe Ser Leu Leu His Phe Ala Phe Leu Lys Leu Pro Met
                                    170
               165
Phe Leu His Thr Ser Val Tyr Ser Pro Phe Thr His Thr Tyr Thr Ile
            180
                                185
Tyr Thr His Leu Thr His Ile Pro Leu Met Cys Ser Phe Thr His Ile
       195
                            200
Asp Thr Pro Leu Thr Leu Thr Leu Phe Leu Tyr Ser Phe Ser His Thr
                        215
Pro Tyr Ser Ser Leu Pro Phe
<210> 2342
<211> 217
<212> PRT
<213> Mus musculus
<400> 2342
Leu Phe Phe Lys Phe Tyr Tyr Ser Ser Phe Phe Ile Thr His Arg Lys
Asn Asn Thr Asp Leu Ser Ser Phe Pro Ile Thr Ser Met Met Tyr Val
            2.0
                                25
His Tyr Ile Leu His Tyr Ile Ser Ile Met Arg Lys Glu Leu Gly Ala
                            40
Leu Leu Glu Ala Val Phe Trp Ile Leu Tyr Asn Ala Ser Ser Phe Thr
                        55
Cys Val Phe His Cys Cys Ser Ser Val Leu Met Ala Cys Phe Cys Asp
                    70
                                        75
Leu Thr Ala Met Ile Lys Leu Ser Cys Leu Asp Thr Phe Leu Lys Glu
Leu Val Met Phe Thr Val Arg Val Ala Val Ile Thr Leu Ala Phe Ile
            100
                                105
Cys Thr Leu Val Ser Tyr Gly Tyr Thr Gly Ala Thr Val Leu Arg Gly
                            120
        115
Pro Ser Thr Met Gly Ile Tyr Lys Ala Leu Tyr Thr His Gly Phe Tyr
                        135
                                            140
Leu Leu Val Val Ser Leu Tyr Tyr Gly Gly Ile Phe Gly Tyr Leu Phe
                    150
                                        155
Pro Glu Leu Ser Asn Arg Met Asp Lys Asp Thr Ile Ile Ala Val Met
                                    170
Thr Ala Val Thr Pro Met Leu Asn Leu Phe Ile Cys Asn Leu Arg Asn
Arg Asp Thr Lys Glu Ala Leu Gly Ile Leu Leu Ser Ser Lys Arg Phe
                            200
                                                205
Tyr Met Ile Thr Ser Glu Tyr Phe His
```

```
<210> 2343
<211> 311
<212> PRT
<213> Mus musculus
<400> 2343
Met Glu Asp Lys Asn Glu Thr Ile Val Ser Glu Phe Leu Phe Leu Ser
                                    10
Leu Thr Asn Arg Leu Tyr Gln Lys Ile Ile Leu Phe Ile Leu Leu Leu
            20
                                25
Phe Ile Tyr Val Ile Thr Gly Gly Gly Asn Leu Gly Met Val Thr Val
                            40
Ile Trp Val Asp Pro Arg Phe His Thr Ser Met Tyr Tyr Phe Ile Ser
                        55
His Leu Ser Phe Val Asp Met Cys Ser Ser Ser Ser Ile Ala Pro Arg
                    70
                                        75
Met Leu Tyr Asp Ile Phe Thr Glu Glu Asn Lys Asn Ile Ser Phe Val
                                    90
Cys Cys Thr Val Leu Trp Phe Ala Gly Leu Phe Glu Gly Thr Glu Cys
            100
                                105
                                                     110
Phe Leu Leu Ala Ala Met Ala Tyr Asp Gln Tyr Thr Ala Thr Cys Lys
                            120
                                                125
Pro Leu Leu Tyr Thr Leu Ile Met Ser Lys Arg Val Cys Ala Gln Phe
                        135
                                            140
Val Ile Trp Pro Tyr Leu Leu Ala Ala Ile Asn Ile Lys Thr His Glu
                    150
                                        155
Thr Leu Thr Phe Cys Leu Pro Phe Cys Gly Ser Asn Thr Ile Asn His
                165
                                    170
Phe Phe Cys Asp Ile Ser Pro Met Leu Val Leu Ala Cys Ala Asp Ser
            180
                                                    190
                                185
Ser Ile Asn Lys Ile Val Val Phe Val Leu Asp Gly Ala Ile Gly Val
        195
                            200
                                                205
Phe Ser Gly Val Ile Ile Thr Val Ser Tyr Ile Ser Ile Leu Met Ala
                        215
                                            220
Ile Leu Lys Ile Gln Thr Thr Asn Arg Arg Met Lys Asp Phe Ser Thr
                    230
                                        235
Tyr Ser Ser His Leu Ala Gly Val Ser Ile Gln Tyr Gly Thr Val Leu
                245
                                    250
Phe Ile Tyr Val Arg Pro Ser Thr Leu Asn Thr Asn Lys Val Ile Ser
                                265
Leu Phe Tyr Thr Val Met Ile Ser Met Leu Asn Pro Leu Ile Tyr Ser
                            280
                                                285
Leu Arg Asn Lys Glu Val Lys Asn Ala Leu Arg Arg Lys Val Gln Arg
                        295
Lys His Phe Ser Arg Asp Trp
<210> 2344
<211> 248
<212> PRT
<213> Mus musculus
<400> 2344
Met Lys Ala Phe Ser Ser Pro Ser Asn Ser Ser Thr Ile Thr Gly Phe
```

Ile Leu Leu Gly Phe Pro Cys His Arg Glu Gly Gln Ile Leu Leu Phe

```
25
Val Leu Phe Ser Ile Val Tyr Leu Leu Thr Leu Met Gly Asn Ala Ser
Ile Ile Cys Ala Val Cys Tyr Asp Leu Ala Ser Phe Ser Phe Phe Leu
Ser Gln Thr Val Leu Gly Asn Ile Ser Asn Asn Asp Tyr Gly Gln Leu
                    7.0
                                        75
Tyr Phe His Thr Ile Ser Phe Cys Phe Leu Phe Ser Phe Ile Phe Ser
               85
                                    90
Val Asn Phe Leu Phe Ile Tyr Leu Phe Ile Tyr Leu Ile Tyr Ile Ser
           100
                                105
                                                    110
Asn Val Ile Thr Phe Pro Thr Phe Pro Ser Asn Pro Leu Cys Pro Leu
                            120
       115
                                                125
Pro Ser Leu Leu Phe Thr Asn Pro Pro Ile Pro Ala Ser Trp Pro Trp
                        135
                                            140
His Ser Ser Ile Leu Gly His Arg Thr Phe Thr Gly Pro Gly Pro Leu
                    150
                                        155
Leu Pro Leu Met Thr Thr Arg Pro Ser Ser Ala Thr Tyr Ala Ser Arg
               165
                                    170
Ala Met Cys Phe Leu Leu Val Val Ser Gln Gly Ser Leu Gly Gly Tyr
           180
                                185
                                                    190
Trp Leu Val His Ile Ile Val Pro Pro Met Gly Met Arg Asn Pro Phe
       195
                            200
Ser Pro Cys Gly Ser Leu Leu Leu His Trp Gly Tyr Val Phe Leu
                        215
                                            220
Asn Ser Ile Thr Pro Thr Ile Tyr Ala Thr Ala Ile Phe Ser Leu Val
                    230
Phe Leu Xaa Xaa Xaa Xaa Xaa
```

<210> 2345

<211> 229

<212> PRT

<213> Mus musculus

<400> 2345

Glu Cys Trp Trp Val Leu Ser Arg Thr Ser Phe Ser His Ala Glu Cys 10 Leu Thr Gln Leu Phe Phe Phe Ala Phe Phe Val Ile Asp Glu Cys Tyr Ile Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys Pro Leu Leu Tyr Gln Val Thr Met Ser His Gln Val Cys Leu Leu Met Thr 55 Met Gly Val Tyr Val Met Gly Phe Ala Gly Ala Leu Ser His Ile Val 70 Cys Met Leu Arg Leu Thr Phe Cys Asp Gly Asn Ile Ile Asn His Tyr 90 Val Cys Asp Val Leu Pro Leu Leu Lys Leu Ser Cys Thr Ser Thr Ser 105 110 Ile Asn Glu Met Val Val Phe Ile Val Val Gly Val Asn Val Ile Val 120 Pro Ser Leu Thr Leu Phe Val Ser Tyr Thr Leu Ile Leu Ser Asn Ile 140 Leu Ser Ile His Ser Ala Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys 155 150 Gly Ser His Val Met Ala Val Ser Phe Phe Phe Gly Ala Ala Ala Phe 170

```
Met Tyr Leu Lys Pro Ser Ser Ala Ser Val Asp Glu Glu Lys Leu Ser
                                185
Thr Ile Phe Tyr Thr Ile Leu Gly Pro Met Leu Asn Pro Phe Ile Tyr
                            200
                                                205
Ser Ile Arg Asn Lys Asp Val His Leu Ala Leu Arg Lys Thr Leu Met
                                             220
Lys Leu Arg Phe Ser
<210> 2346
<211> 268
<212> PRT
<213> Mus musculus
<400> 2346
Gly His Thr Ser Cys Gln Ser Leu Gly Gln Ala Phe Ile Leu Leu Gly
                                    10
Leu Thr Gln Gln Pro Glu Leu Gln Leu Pro Leu Phe Phe Gln Phe Leu
                                                     30
Gly Ile Tyr Val Val Ser Ile Val Gly Asn Leu Gly Leu Ile Val Leu
        35
                            40
Ile Val Leu Asn Pro His Leu His Thr Pro Met Tyr Tyr Phe Leu Phe
                                             60
Asn Leu Ser Phe Thr Asp Leu Cys Tyr Ser Ser Ala Ile Thr Pro Lys
                    70
                                         75
                                                             80
Met Leu Val Gly Phe Val Asn Gln Asn Ile Ile Ala His Ala Glu Cys
                                     90
Leu Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Leu Asp Glu Cys Tyr
                                105
Ile Cys Thr Glu Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys Thr
                            120
Leu Leu Asn Gln Val Thr Met Ser His Gln Val Cys Leu Gly Asn His
                        135
Lys Arg Leu Asp Tyr Ile Ile Phe Arg Asn Gly Lys Ile Lys Lys Ile
                                         155
                    150
Phe Leu Asn Val His Ile Tyr Phe Ile Ile Phe Phe Val Cys Gly Thr
                                     170 .
                                                         175
Ser Tyr Pro Ser Leu Ser Cys Ala Ser Val Pro Leu Thr Tyr Ile Leu
                                185
                                                     190
Arg Val Gly Thr Phe Val Ser Phe Val Trp Leu Ser Gln Thr Met Ser
                            200
                                                 205
        195
Tyr Tyr Phe Ile Ile Ala Asn Leu Trp Asp Asn Leu Glu Ser Ser Phe
                                             220
Arg Leu Ile Cys Cys Ser Lys Gly Ser Lys Glu Gly Lys Lys Leu Leu
                    230
                                        235
Ser Phe Trp Ser Phe Phe Ile Val Leu Lys Gln Phe Arg Lys Glu Gly
                245
                                    250
Leu Thr Ser Tyr Gln Pro Ser Asn Ile His Asp Ser
            260
                                265
<210> 2347
<211> 213
<212> PRT
<213> Mus musculus
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Glu Ser Gly Pro Leu Pro Leu Pro Ser Leu Val Trp Gln Gln Asn Leu

<400> 2347

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Ser Phe Asp Gln Ser Asn Cys Leu Gly Tyr Ile Ser Phe Ser Arg Pro
                                25
Leu Ala Pro Leu Leu Phe Gln Val Ser Lys Met His Phe Gln Ala Arg
Thr Gln Val Val Cys Trp Pro Asp Thr Thr Ile Arg Phe Ala Gly
Ser Ser Val His Thr Gly Cys Val Phe Leu Gly His Ala Ile Asn His
                    7.0
Leu Phe Asn Ile Leu Thr Leu Leu Gln Leu Ser Ala Thr Thr Tyr Val
                                    90
Asn Val Val Ile Leu Ile Gly Val Tyr Ile Thr Val Pro Ser Phe Thr
            100
                                105
                                                    110
Ile Leu Ile Ser Tyr Val Phe Ile Phe Ile Asn Ile Leu Asn Ile Lys
                            120
Ser Met Gln Arg Ile Ser Lys Asp Phe Ser Ile Cys Arg Phe His Ile
                        135
                                            140
Ala Ser Ile Tyr Val Phe Ile Glu Phe Thr Ala Phe Lys Cys Phe Lys
                    150
                                        155
Tyr Ser Tyr Gly Ser Ile Asp Gln Gly Phe Tyr Ser Ser Val Phe Tyr
                                    170
Thr Asp Val Ile Leu Ile Leu Asn Ile Ile Ile Tyr Ser Met Cys Ile
                                185
Met Asp Val Glu Met Ala Leu Met Asp Ala Leu Met Lys Phe Gln Arg
        195
Asn Val Phe His Leu
   210
<210> 2348
<211> 274
<212> PRT
<213> Mus musculus
<400> 2348
Leu Gln Ile Leu Trp Lys Lys Gly Ile Ala Glu Leu Gln Leu Leu
Leu Phe Phe Asn Leu Leu Val Val Thr Ile Val Gly Asn Leu Asp Thr
Leu Ile Ser Ile Leu Phe Ser Ser Gln Leu His Thr Pro Val Val Tyr
                            40
Leu Leu Ser Arg Leu Leu Phe Ile Asp Cys Ser Lys Ser Thr Val Ile
Thr Pro Thr Met Leu Leu Asn Phe Ala Thr Glu Ser Val Ile Cys Tyr
                    70
                                                             80
Glu Cys Ile Pro Gln Tyr Tyr Phe Cys Ala Phe Gly Ala Ala Lys Cys
                                    90
Val Leu Leu Ala Ala Val Ala Tyr Asp Leu Cys Val Ala Val His Asn
                                105
Pro Leu Leu Tyr Asn Leu Ile Ile Ser Tyr Gln Leu Trp Ser Ile Val
                                                125
Val Val Val Tyr Gly Arg Gly Leu Leu Cys Thr Val Ala His Thr Val
                        135
Phe Val Leu Arg Val Phe Cys Phe Leu Gln Asp Trp Tyr Ile Lys Pro
                    150
                                        155
Leu Leu Ser Gly Ser Ser Thr Phe Ile Ser Glu Leu Leu Ala Ser Ala
                165
                                    170
```

Phe Asn Leu Thr Leu Leu Cys Leu Gly Ile Leu Ser Tyr Tyr Ile Phe

185

180

```
Ile Ile Phe Ser Leu Phe Gln Ser Ile Gln Ser Thr Ser Thr Asp Gly
Arg Ser Lys Ala Phe Ser Thr Cys Arg Ser Ser Ile Leu Ala Val Thr
                        215
Val Phe Trp Gly Tyr Ile Leu Ala Leu Ser Ser Leu Asp Glu Gly Lys
                    230
                                        235
Val Leu Thr Met Ser Tyr Thr Ile Leu Glu Ser Met Val Lys Ser Arg
                245
                                    250
Ile Tyr Ser Leu Arg Asn Lys Asp Ala Lys Val Ala Met Lys Asn Tyr
                                265
Pro Gly
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<210> 2349 <211> 305 <212> PRT <213> Mus musculus

<400> 2349 Met Asn Ala Arg Gly Asn Ser Thr Glu Ile Thr Gln Phe Ile Leu Leu 20

Gly Val Thr Asn Leu Pro Arg Ile Ile Ile Leu Leu Phe Val Thr Phe 25 Leu Leu Ile Tyr Ile Thr Thr Leu Thr Trp Asn Leu Ser Leu Ile Val 40 Leu Ile Arg Met Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu 55 Tyr Asn Leu Ser Ile Ile Gly Leu Cys Tyr Val Thr Cys Thr Val Pro 70 75 Lys Lys Met Leu Ser Asn Phe Phe Gln Glu Lys Gln Thr Ile Ser Phe 90 8.5 Val Gly Cys Ile Val Gln Asn Phe Ile Phe Phe Thr Met Gly Leu Ser 105 110 100 Glu Ser Cys Leu Met Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile 115 120 125 Cys Asn Pro Leu Leu Tyr Ala Ser Ile Met Ser Pro Thr Phe Cys Val 135 140 Leu Lys Val Leu Glu Ser Tyr Leu Ser Gly Ile Thr Ala Ser Leu Leu 150 155 Gln Leu Phe Ala Leu Phe Cys Gly Thr Asn Val Ile Lys His Phe Phe 170 165 Cys Gly Met Pro Gln Leu Leu Val Leu Ser Cys Ile Asp Thr Phe Leu 185 190 180 Thr Ala Ile Leu Thr Met Ile Phe Gly Phe Val Asn Met Leu Val Ile 200 Met Ile Ser Tyr Gly Tyr Ile Val Met Ser Ile Leu Lys Ile Thr Ser 215 220 Ala Lys Gly Arg Ser Lys Ala Phe Asn Thr Cys Ala Pro His Leu Thr 230 235 Pro Val Ser Leu Phe Leu Thr Ser Ser Ile Phe Val Tyr Leu Ser Ser

10

245 250 Ser Ser Gly Gly Ser Ser Phe Asp Arg Phe Val Ser Val Val Tyr 260 265 Thr Val Val Ile Pro Val Leu Ile Pro Leu Ile Tyr Ser Leu Lys Asn 280 Arg Glu Ile Lys Asp Ala Met Lys Arg Leu Lys Lys Lys Thr Ile Cys 300 Ser

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<210> 2350
<211> 283
<212> PRT
<213> Mus musculus
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Thr Leu Leu Gly Phe Pro Ile Arg Pro Glu Gln Gln Tyr Ile Phe
                                    10
1
Phe Thr Leu Leu Leu Ala Met Cys Leu Thr Thr Val Leu Ser Ser Cys
                                25
            20
Thr Ser Thr His Leu His Thr Leu Met Tyr Leu Phe Leu Ile Ile Leu
                            40
His Ile Trp Leu Asp Ser His Pro Gln Val Pro Met Tyr Phe Phe Leu
                        55
Ser His Leu Ala Ser Val Ser Ser Val Thr Val Ser Glu Met Leu Trp
                    70
                                        75
Ser Ile Gln Thr Gln His Leu Ser Ile Pro Tyr Glu Gly His Phe Ser
                                    90
                8.5
Asn Leu Val Phe Pro Tyr Phe Phe Tyr Met Leu Asp Asn Leu Leu Leu
            100
                                105
                                                     110
Glu Met Val Val Tyr Glu Arg Tyr Val Ser Ile His Pro Leu Tyr Tyr
        115
                            120
                                                 125
Thr Ile Val Met Arg Glu Glu Leu Tyr Asp Leu Leu Val Ser Gly Cys
                                            140
                        135
Cys Phe Ile Ser Tyr Ile His Thr Leu Leu His Thr Leu Leu Cys
                    150
                                        155
145
Gln Ser Ile Pro Tyr His Phe Cys Tyr Phe Asn Glu His Leu Lys Leu
                                    170
                                                         175
                165
Ser Cys Leu Asn Thr Pro Phe Asn Glu Leu Val Ile Phe Ile Glu Gly
                                185
                                                     190
            180
Val Leu Thr Phe Leu Pro Leu Gly Thr Ile Ser Gly Pro Tyr Ile Cys
                            200
                                                 205
        195
Thr Gly Ala Thr Val Leu Lys Cys Pro Ser Met Lys Asn Ile Tyr Lys
                                             220
                        215
Val Leu His Gly Ala Phe Ala Leu Val Leu Ala Ile Ile Tyr Phe Phe
                    230
                                         235
His Phe Ser Asn Asn Ser Lys Phe Lys Val Val Ile Val Ser Val Met
                                    250
                245
Tyr Thr Val Val Thr Thr Met Leu Asn Pro Phe Ile Tyr Ser Ile Glu
                                265
Ile Lys Leu Ala His Gly Pro Leu Tyr Arg Lys
<210> 2351
<211> 304
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (166)...(200)
<223> Any amino acid
<400> 2351
Met Glu Asn His Ser Leu Thr Leu Val Thr Glu Phe Ile Leu Met Gly
```

```
Ile Thr Glu Arg Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu
Ile Ile Tyr Ile Phe Ser Leu Val Gly Asn Leu Gly Met Ile Ile Leu
       35
Thr Met Val Glu Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg
His Leu Ala Thr Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys
                                                        80
                  70
                                     75
Met Leu Arg Ser Phe Leu Val Asp Gln Asn Arg Ile Ser Phe His Phe
Cvs Ala Val Gln Phe Ala Phe Phe Ser Met Phe Ile Ile Ser Glu Phe
           100
Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                          120
Pro Leu Leu Tyr Asn Val Ile Met Ser Gln Arg Val Cys Trp Val Leu
                      135
                                         140
Val Thr Ile Pro Tyr Leu Ser Ile Phe Val Ala Leu Ile Ala Thr Ile
                  150
                                     155
165
                                 170
180
                              185
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Pro Leu Val Ile Leu Val Ser
       195
                          200
Tyr Leu Leu Ile Leu Arg Ala Ile Leu Arg Met Asn Ser Ala Glu Gly
                      215
Arg Gln Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Ile
                  230
Val Phe Tyr Gly Thr Leu Ile Phe Met Tyr Val Gln Pro Lys Ser Ser
                                 250
               245
His Ser Leu Asn Thr Asp Asn Ala Ala Ser Ile Phe Tyr Thr Leu Ile
                              265
Ile Leu Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val
                          280
Lys Tyr Ser Ile Arg Lys Thr Gly Lys Thr Ile Gln Asn Ile Phe Ser
<210> 2352
<211> 297
<212> PRT
<213> Mus musculus
<400> 2352
Met Glu Lys Tyr Asn Leu Thr Met Val Thr Glu Phe Ile Leu Val Gly
                                 10
Ile Pro Tyr His Pro Glu Phe Gln Val Leu Leu Phe Gly Leu Phe Leu
Ile Ile Tyr Leu Thr Ser Leu Val Gly Asn Leu Gly Met Ile Ile Leu
Ala Met Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg
His Leu Ala Thr Ile Asp Leu Gly Trp Ser Thr Lys Met Leu Asn Asn
                  70
Phe Leu Val Asp Gln Asn Ala Ile Ser Phe Tyr Ala Cys Ala Ile Gln
                                 90
Leu Ser Phe Phe Ser Met Phe Thr Ile Lys Lys Phe Phe Ile Leu Ser
```

```
Ala Met Ser Tyr Asp Cys Tyr Val Ala Phe Cys Lys Pro Leu Leu Tyr
                            120
        115
Thr Ile Ile Met Ala Ile Trp Val Met Ile Leu Ile Thr Ile Val Asp
                        135
                                            140
Ser Arg Gln Lys Thr Pro Met Asn Ile Ile Leu Gln Thr Cys Ser Asn
                    150
                                        155
Tyr Asn Phe His Leu Leu Asn Ser Cys Gln Tyr Gln Asn Phe Glu Ile
                165
                                    170
Phe Tyr Cys Gly Ser Lys Pro Val Ser Phe Arg Leu Phe Ala Ser Gln
            180
                                185
                                                    190
Ile Ser Leu Leu Tyr Phe Pro His Ser Leu Ala Phe Tyr Tyr Phe Ile
                            200
        195
Ile Ser Val Thr Ser Met Trp Pro Val Ala Ala Asn Leu Cys Phe Tyr
                        215
                                            220
Gly His His Ile Lys Lys Ser Leu Leu Val Ser Ser Gly Asp His Leu
                    230
                                        235
Tyr Leu Thr Thr Leu Pro Val Ile Met Lys Ile Lys Met Phe Thr Leu
                                    250
                                                        255
                245
Phe Phe Cys Val His Lys Ser Ser Val Ile Ser Asn Ala Thr Val Phe
            260
                                265
Leu Phe Asn Val Ala Leu Phe Glu Tyr Ser Gln Asn Thr Asp His Leu
                            280
Ile Ser Ser Ala Phe Phe Pro Leu Phe
                        295
<210> 2353
<211> 271
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (139)...(145)
<223> Any amino acid
<400> 2353
Met Glu Lys Gln Asn Leu Thr Val Leu Ser Glu Phe Ile Leu Lys Gly
                 5
                                    10
1
Ile Thr Asp Arg Pro Glu Met Gln Ala Pro Leu Phe Gly Leu Leu Phe
                                25
Ile Ile Tyr Leu Ile Ser Ala Val Gly Asn Leu Gly Ile Ile Ile Ile
Thr Asn Val Gly Ser Arg Leu Cys Ile Pro Met Tyr Phe Phe Leu Lys
His Leu Ala Phe Thr Asp Leu Gly Tyr Ser Thr Ala Ile Gly Pro Lys
                    70
                                                             80
Met Leu Val Asn Phe Val Ala Glu Asn Asn Ser Val Ser Tyr Tyr Leu
                                    90
Cys Ala Thr Gln Leu Ala Cys Phe Leu Leu Phe Ile Thr Trp Glu Leu
                                                    110
Leu Ile Phe Ser Ser Met Ser Tyr Asp Arg Tyr Val Pro Ile Cys Asn
                            120
                                                125
Pro Leu Leu Tyr Thr Gly Ile Met Ser Gln Xaa Xaa Xaa Xaa Xaa Xaa
                        135
                                            140
Xaa Glu Phe Trp Val Leu Ile Leu Thr Phe Phe Ile Ile Ile Leu
                    150
                                        155
Glu Lys Lys Ile Lys Val Pro Leu Leu Ser Phe Arg Gly Lys Gly Glu
```

165

```
Phe Lys Gln Asp Leu Ser Thr Leu Cys Ile Glu Tyr His Val Glu Val
           180
                              185
                                                 190
Ser Ser Asp His Lys Cys Val Ser Leu Ser Phe Met Met Ser Gly Lys
       195
                          200
                                             205
Ala Lys Glu Thr Leu Asn Cys Leu Cys Ser Leu Leu Thr Phe Gln Lys
                      215
                                         220
Lys Met Gly Pro Leu Cys Gly Leu Phe Leu Phe Phe Tyr Gly Val Arg
                  230
                                     235
Gln Ala Phe Tyr Phe Arg Leu Gln Phe Ile Tyr Met Cys Cys Leu Gln
                                  250
Met Lys Phe Asp Tyr Asp Ile Lys Leu Leu Ile Ser Val His Tyr
           260
                              265
<210> 2354
<211> 268
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (194)...(229)
<223> Any amino acid
<400> 2354
Met Asp Gly Gly Asn Gln Thr Ile Val Ser Glu Phe Ile Leu Gln Gly
                                  10
Leu Ala Asn Ser Lys Asn Ile Gln Val Leu Leu Phe Met Ile Leu Leu
Thr Leu Tyr Leu Leu Ile Met Ser Gly Asn Ile Val Ile Leu Ile Leu
       35
                          40
Ile Thr Thr Asp Pro His Leu Leu Ser Pro Met Tyr Phe Leu Leu Ala
                      55
                                         60
Asn Met Ser Phe Val Asp Met Trp Leu Ser Ser Asn Ile Thr Pro Lys
                  70
                                     75
                                                        80
Met Ile Thr Gly Phe Leu Arg Glu Asn Lys Thr Ile Ser Phe Ala Gly
                                  90
               85
Cys Met Phe Gln Val Phe Phe Ser His Cys Ile Ala Ala Gly Glu Met
           100
                              105
                                                 110
Val Leu Leu Val Val Met Ala Tyr Asp His Tyr Val Ala Ile Cys Lys
                          120
Pro Leu His Tyr Ile Thr Ile Met Asn Leu Lys Arg Cys Thr Gly Leu
                      135
                                         140
Val Phe Thr Ser Trp Ile Ile Gly Phe Ile His Gly Ile Ser His Leu
                  150
                                     155
                                                        160
Val Val Val His Leu Arg Phe Cys Gly Pro Lys Glu Thr Asp Ser
                                  170
                                                    175
              165
Phe Phe Cys Asp Met Pro Leu Val Ile Lys Leu Ala Cys Met Asp Ser
           180
                              185
                                                190
200
       195
                                             205
215
                                         220
Xaa Xaa Xaa Xaa Ile Thr Val Val Leu Tyr Thr Phe Pro Asn Ser
                  230
                                     235
His Val Thr Trp Glu Asn Ile Asn Lys Phe Phe Pro Ser Ile His Leu
                                  250
               245
```

Tyr Ala Ile His Thr Pro Lys Leu Ser Thr Ser Ile

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<210> 2355
<211> 231
<212> PRT
<213> Mus musculus
<220>
<221> CONFLICT
<222> (89)...(96)
<223> Any amino acid
<400> 2355
Thr His Thr Glu Asp Ser Asn Gln Thr Val Val Ser Ala Phe Ile Phe
                 5
                                     10
                                                         15
Gln Gly Leu Cys Thr Ser Arg Gln Leu Glu Ile Phe Leu Leu Pro
            20
                                 25
                                                     30
Phe Ser Val Leu Tyr Leu Met Thr Leu Val Asp Asn Leu Phe Val Val.
                             40
Ile Leu Ile Ile Thr Asp His His Phe Asn Ser Pro Met Tyr Phe Leu
                         55
                                             60
Ser Ala Asn Leu Ser Phe Gly Asp Phe Tyr Leu Ser Ser Val Asn Thr
                     70
                                         75
Pro Lys Leu Thr Ile Asp Leu Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
                85
                                     90
Leu Met Ser Val Leu Leu Arq Asn Thr Leu Thr Met His Ser Phe
                                 105
                                                     110
Tyr Lys Gly Lys His Leu Ile Gly Asn Ser Leu Gln Phe Gln Arg Phe
                             120
Ile Ser Phe Ser Ser Leu Trp Val Val Ile Ala Ala Cys Arg Tyr Thr
                         135
                                             140
Cys Thr Gly Asp Ile Val Glu Arg Ser Thr Asp Arg Ser Met His Asn
                                         155
                     150
Arg Lys Lys Glu Thr Leu Asn Leu Lys Ala Phe Glu Ile Thr Asn Pro
                                     170
Ser Phe Ser Cys Thr Leu Pro Gln Thr Arg Cys Met Pro Ser Asn Pro
            180
                                 185
                                                     190
Ser Gln Val Met Pro Leu Pro Asn Asp Val Phe Lys Tyr Ile Ser Leu
                             200
                                                 205
Lys Val Phe Leu Phe Lys Ala Phe Ser Leu Ile Ile Met Asn Ala Phe
                         215
                                             220
Ser Pro Thr Ser Lys Val Ser
225
                     230
. <210> 2356
<211> 314
<212> PRT
<213> Mus musculus
<400> 2356
Met Lys Asn Lys Ser Met Glu Leu Asp Phe Ile Leu Leu Gly Leu Thr
                                     10
Asp Asp Pro Gln Leu Gln Ile Val Val Phe Leu Phe Leu Phe Leu Asn
            20
                                 25
Tyr Val Met Ser Leu Val Gly Asn Leu Ile Ile Val Leu Leu Thr Leu
        35
                             40
                                                 4.5
Leu Asp Pro Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
    50
                         55
```

```
Ser Phe Leu Glu Ile Met Phe Thr Thr Val Cys Ile Pro Arg Phe Leu
Thr Thr Ile Val Thr Gly Asp Lys Thr Ile Thr Tyr Asn Asn Cys Ala
                85
                                    90
Ala Gln Leu Phe Phe Ile Leu Leu Gly Val Thr Glu Phe Tyr Leu
                                105
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu
                                                125
                            120
His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Gln Leu Val Leu
    130
                        135
Ser Ser Trp Val Thr Gly Phe Leu Ile Ile Phe Pro Pro Leu Ala Met
                    150
                                        155
Gly Leu Lys Leu Asp Phe Cys Asp Ser Arg Ile Ile Asp His Phe Met
                165
                                    170
Cys Glu Thr Ser Pro Ile Leu Gln Ile Ser Cys Thr Asp Thr His Val
                                185
                                                    190
            180
Leu Glu Met Met Ser Phe Val Leu Ala Val Val Thr Leu Val Val Thr
                            200
                                                205
Leu Val Leu Val Ser Leu Ser Tyr Ser Phe Ile Ile Lys Thr Ile Met
                        215
                                            220
Ser Phe Pro Ser Ala Gln Gln Arg Thr Lys Ala Phe Ser Thr Cys Thr
                    230
                                        235
Ser His Met Phe Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met
                245
                                    250
Tyr Ile Lys Pro Ser Ala Arg Glu Arg Val Ser Val Ser Lys Gly Val
                                                    270
            260
                                265
Ala Leu Leu Tyr Thr Ser Ile Ala Pro Ser Pro Glu Pro Leu Leu Tyr
        275
                            280
Thr Leu Arg Asn Gln Gln Val Lys Glu Val Phe Trp Asp Val Leu Gln
                        295
                                            300
Lys Thr Leu Gly Phe Ser Lys His Lys Val
                    310
```

```
<210> 2357
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<400> 2357

Ser Tyr Ala Gly Cys Val Ser Gln Leu Val Phe Tyr His Phe Leu Gly Gly Thr Glu Cys Phe Leu Tyr Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Tyr Pro Leu Arg Tyr Ser Val Ile Met Ser His Arg Ile Cys Ala Phe Leu Ala Met Gly Thr Ala Val Phe Gly Cys Ile His Ser Thr Phe Leu Thr Thr Leu Thr Phe Gln Leu Pro Tyr Cys Gly Pro Lys Asp Val Asn Tyr Tyr Phe Cys Asp Ile Pro Val Val Met Lys Leu Ala Cys Ala Asp Thr Ser Thr Leu Glu Met Val Gly Phe Ile Ser Val Gly Leu Met Pro Leu Ser Cys Phe Phe Phe Ile Leu Thr Ser Tyr Ser Cys Ile Val Arg Ser Ile Leu Gln Ile Arg Ser Thr Glu Gly Arg His Arg Ala Phe Ser Thr Cys Ser Ala His Phe Thr Ala Ile Leu Leu Phe Tyr

<211> 221

<212> PRT

<213> Mus musculus

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150
145
Met Pro Val Ile Phe Ile Tyr Leu Arg Pro Thr Pro Ser Pro Trp Leu
                                    170
                                                        175
                165
Asp Ala Thr Val Gln Ile Leu Asn Asn Leu Val Thr Pro Met Leu Asn
                                                    190
            180
                                185
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ser Leu Trp
                            200
Thr Val Leu His Leu Leu Cys Phe Leu Pro Lys His Leu
<210> 2358
<211> 199
<212> PRT
<213> Mus musculus
<400> 2358
Ile Leu Leu Thr Leu Met Gly Tyr Asp Arg Phe Leu Ala Ile Cys Asn
                                    10
Pro Leu Arg Tyr Pro Leu Leu Met Thr Asn Val Ala Cys Gly Gln Leu
            20
                                25
Val Ala Ser Ala Trp Val Gly Gly Phe Phe Ile Ser Leu Ile Glu Thr
                            40
Thr Leu Ile Phe Arg Val Ser Phe Cys Ile Pro Asn Leu Ile Arg His
                       55
Phe Phe Cys His Met Arg Ala Val Leu Arg Leu Ser Cys Thr Asp Ser
                    70
                                        75
Asn Phe Thr Glu Phe Ile Val Thr Leu Met Ser Val Ser Gly Leu Leu
                                    90
                85
Gly Thr Phe Leu Leu Ile Leu Leu Thr Tyr Val Phe Ile Leu Ser Ser
                                105
            100
Val Leu Lys Ile Pro Ser Ala Glu Gly Lys Gln Lys Ala Phe Ser Thr
                            120
        115
Cys Ala Ser His Leu Thr Val Val Leu Ile His Phe Gly Phe Ala Ser
                        135
                                            140
Val Val Tyr Met Lys Pro Glu Asn Ser Gly Gly Asp Asp Thr Leu Ile
                    150
                                        155
Ala Val Pro Tyr Thr Val Ile Thr Pro Phe Leu Ser Pro Ile Ile Phe
                165
                                    170
Thr Leu Arg Asn Lys Asp Met Lys Asn Ala Phe Arg Lys Ile Met Arg
            180
                                185
Lys Thr Val Val Leu Lys Lys
        195
<210> 2359
<211> 182
<212> PRT
<213> Mus musculus
<400> 2359
Arq Val Cys Ile Leu Phe Leu Val Met Ala Trp Ala Gly Gly Leu Ala
His Ala Phe Val Gln Val Leu Ala Val Tyr Asn Phe Pro Phe Cys Gly
Pro Asn Ile Ile Asp His Phe Gly Cys Asp Ile Tyr Pro Leu Leu Leu
                            40
Leu Ala Cys Thr Asp Thr Tyr Phe Leu Gly Leu Ser Ile Ile Gly Asn
                        55
```

```
Asn Gly Ala Met Cys Ile Val Ile Phe Thr Leu Leu Leu Ser Tyr
Gly Ile Ile Leu Arg Phe Leu Lys Asn His Ser Gln Glu Gly Arg Arg
Lys Ala Leu Ser Thr Cys Gly Ser His Ile Thr Val Val Phe Leu Phe
            100
                                105
Phe Val Pro Cys Ile Phe Met Tyr Val Arg Pro Val Ser Ser Phe Pro
       115
                            120
                                                125
Ile Asp Lys Phe Ile Thr Val Ile Tyr Thr Ile Val Thr Pro Met Leu
    130
                       135
Asn Pro Leu Ile Tyr Thr Leu Arg Asn Ser Glu Met Lys Asn Ser Met
                   150
                                        155
Glu Lys Leu Gln Lys Thr Leu Ser Pro Ser Arg Ile Arg Leu Ser
                                    170
               165
Ser Cys Cys Leu Cys Tyr
            180
```

<210> 2360 <211> 154 <212> PRT

<213> Mus musculus

<400> 2360 Thr Leu Ile Ile Ser Ile Asn Ile Ile Asp Ser Asn Ile Ile Asp His Phe Gly Cys Asp Val Asn Pro Leu Leu Lys Ile Ser Cys Ser Asp Lys 20 25 Trp Leu Ile Glu Gln Met Val Ile Cys Ser Ala Val Leu Thr Phe Ile 40 Ile Thr Leu Leu Cys Ala Val Phe Ser Tyr Met Tyr Ile Ile Arg Thr 55 Val Leu Lys Phe Pro Ser Ala Gln Gln Lys Arg Lys Ala Phe Ser Thr 70 75 Cys Ser Ser His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile 85 Phe Ile Tyr Ile Lys Pro Ser Ala Lys Glu Glu Val Thr Ile Asn Lys 105 Cys Leu Ser Gly Leu Ile Ser Ser Ile Ser Pro Met Leu Asn Pro Phe 115 120 Ile Tyr Thr Leu Arg Asn Lys Gln Val Lys Gln Ala Ser Gln Asp Leu 135 Ile Lys Lys Ile Ala Phe Leu Leu Lys Lys

<210> 2361 <211> 132 <212> PRT <213> Mus musculus

<400> 2361

Thr Ser Leu Tyr Glu Thr Leu Met Tyr Ala Cys Cys Val Leu Met Leu Leu Ile Pro Ile Ser Phe Ile Ser Val Ser Tyr Thr Arg Ile Leu Ile 20 25 Thr Val Tyr His Met Ser Ser Ala Glu Gly Arg Arg Lys Ala Phe Thr 40 Thr Cys Ser Ser His Ile Ile Val Val Ser Ile Phe Tyr Gly Ala Ala

```
55
Phe Tyr Thr Asn Val Leu Pro His Ser Tyr His Thr Pro Glu Lys Asp
                    70
                                        75
Lys Val Val Ser Ala Phe Tyr Thr Ile Leu Thr Pro Met Leu Asn Pro
                85
                                    90
Leu Ile Tyr Ser Leu Arg Asn Arg Asp Val Ala Val Ala Leu Arg Lys
                                105
Val Leu Arg Lys Tyr Ala Ser Ser Gln Arg Leu Arg Val Arg His Ile
       115
                            120
Pro Glu Lys Tyr
   130
<210> 2362
<211> 230
<212> PRT
<213> Mus musculus
<400> 2362
Gln Val Leu Leu Ile Phe Trp Phe Asn Met Lys Pro Ile Ser Phe Val
                5
                                    10
1
Gly Cys Phe Leu Gln Met Phe Val Met Asn Thr Phe Leu Pro Met Glu
            20
                                25
Ser Ser Thr Phe Leu Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                            40
His Pro Leu Trp Phe Leu Ser Ile Ile Lys Lys Gln Phe Val Ile Asn
                        55
Ala Gly Ile Phe Ile Val Val Arg Asn Leu Leu Ala Thr Leu Pro Thr
                    70
Pro Val Leu Ala Ala Arg Leu Asn Tyr Cys Ala Ser Asn Val Val Glu
                                    90
                85
Asn Cys Ile Cys Ala Asn Ile Ser Val Ala Lys Leu Ser Cys Gly Asp
           100
                                105
                                                    110
Ile Arg Leu Asn Lys Leu Tyr Gln Phe Val Ser Val Trp Cys Leu Leu
       115
                            120
                                                125
Gly Ser Asp Leu Val Leu Ile Leu Leu Ser Tyr Cys Phe Ile Leu Arg
                        135
                                            140
Val Val Met Cys Gln Gln Ser Gly Gly Thr Val Thr Lys Ala Leu Ser
                    150
                                        155
Thr Cys Gly Ser His Leu Ile Leu Ile Leu Phe Phe Tyr Thr Leu Leu
                165
                                    170
                                                        175
Leu Val Phe Ile Phe Thr Asn Lys Ala Gly Lys Lys Ile Pro Ser Glu
                                185
                                                    190
Val Pro Ile Leu Leu Asn Val Leu His His Leu Ile Pro Pro Ala Leu
       195
                            200
Asn Pro Ile Val Tyr Gly Val Arg Thr Gln Glu Ile Lys Gln Gly Ile
                        215
Ile Lys Leu Phe Lys His
<210> 2363
<211> 312
<212> PRT
<213> Mus musculus
<400> 2363
Met Asn Glu Ala Asn Tyr Ser Glu Val Ser Glu Phe Ile Phe Leu Gly
                                    10
```

```
Leu Ser Thr Tyr Arg Pro Thr Gln Tyr Phe Leu Phe Ala Phe Ala Ile
Ile Ser Tyr Ala Ala Thr Phe Leu Gly Asn Phe Ser Val Val Phe Ile
Val Ile Phe Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Ala
Asn Leu Ser Phe Val Asp Phe Cys Phe Ser Thr Ser Thr Val Pro Lys
                    70
Leu Ile Ser Asp Leu Tyr Ser Gly His Ser Ile Ile Ser Ile Gln Ser
                                    90
Cys Ile Phe Gln Met Phe Val Leu His Leu Leu Gly Gly Cys Glu Met
            100
                                105
Val Leu Leu Val Ala Met Ala Trp Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu Tyr Tyr Leu Thr Ile Met Asn Pro Arg Met Cys Leu Leu Leu
                        135
Leu Ile Ser Ala Trp Ile Ile Gly Leu Ile His Ser Val Ala Gln Leu
                    150
                                        155
Ala Phe Val Val His Leu Pro Phe Cys Ala Ser Asn Glu Ile Asp Ser
                                    170
                                                        175
                165
Phe Tyr Cys Asp Leu Pro Arg Phe Ile Lys Met Ala Cys Ile Asn Thr
           180
                                185
Tyr Arg Met Glu Phe Leu Val Thr Ala Asp Ser Gly Phe Ile Ser Leu
       195
                            200
Ser Thr Phe Phe Leu Leu Ile Ile Ser Tyr Ile Phe Ile Leu Phe Ile
                        215
Val Arg Lys Gln Ser Leu Gly Ser Leu Ser Lys Ala Phe Ser Thr Leu
                                        235
                    230
Ser Ala His Ile Cys Val Val Leu Phe Phe Gly Pro Cys Ile Phe
                245
                                    250
Val Tyr Ile Trp Pro Phe Pro Thr Val Pro Val Asp Lys Phe Leu Ala
            260
                                265
Ile Leu Asp Phe Met Ile Ile Pro Ile Leu Asn Pro Ala Ile Tyr Thr
                            280
Leu Arg Asn Lys Asp Met Lys Val Ala Met Arg Arg Leu Ser Val Gln
                        295
                                            300
Leu Leu Ser Arg Lys Ser Ile Cys
                    310
```

```
<210> 2364
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<400> 2364

Met Glu Asp Ser Asn Gln Thr Val Val Ser Glu Phe Ile Phe Gln Gly 10 Leu Cys Thr Ser Arg Gln Leu Glu Ile Phe Leu Leu Pro Phe Ser 20 25 Val Leu Tyr Leu Val Thr Leu Val Gly Asn Leu Phe Val Val Ile Leu 35 40 Ile Ile Ile Asp His His Leu His Ser Pro Met Tyr Phe Leu Leu Ala 55 60 Asn Leu Ser Phe Val Asp Phe Cys Leu Ser Ser Val Asn Thr Pro Lys 75 70 Leu Thr Ile Asp Leu Leu Lys Glu Asn Lys Thr Ile Ser Phe Gly Gly 90 Cys Met Ser Gln Ile Leu Cys Val His Phe Phe Gly Gly Ser Glu Met

<211> 227

<212> PRT

<213> Mus musculus

```
100
                                105
Val Leu Leu Val Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
       115
                            120
Pro Leu His Tyr Ser Ser Ile Met Asp Arg Gln Lys Cys Ile Trp Leu
                        135
                                            140
Val Val Ile Ser Trp Ile Val Gly Phe Val His Ala Ile Ser Gln Leu
                   150
                                        155
Leu Leu Ile Leu Asp Leu Pro Phe Cys Gly Pro Arg Val Ile Asp Ser
               165
                                    170
Phe Phe Cys Asp Ile Pro Leu Val Met Lys Leu Ala Cys Met Asn Thr
           180
                                185
                                                    190
Asp Thr Leu Glu Ile Leu Ile Asn Ala Asp Ser Gly Ile Leu Ala Thr
                            200
Thr Cys Phe Thr Leu Leu Leu Ile Ser Tyr Thr Tyr Ile Leu Leu Thr
   210
Val Gln His
225
<210> 2365
<211> 271
<212> PRT
<213> Mus musculus
<400> 2365
Met Ala Ile Ile Gly Glu Glu Asn Met Thr Gln Ile Ser Glu Ile Ile
                                    10
Leu Leu Gly Phe Gly Asp Leu His Gly Leu Gln Phe Leu Leu Phe Gly
                                25
Leu Phe Leu Ala Ile Tyr Val Met Thr Leu Leu Gly Asn Ile Val Ile
                            40
Leu Thr Val Val Ser Thr Asp Cys Ser Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Gly His Phe Ser Phe Leu Glu Ile Ser Tyr Thr Thr Thr Ile
                    70
Glu Pro Val Met Leu Trp Thr Leu Leu Ser Ala His Val Pro Ile Ser
                                    90
               8.5
Leu Pro Ala Cys Ala Cys Gln Phe Tyr Phe Phe Ala Ser Leu Val Ala
                                105
           100
Thr Glu Cys Phe Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Ile Ala
       115
                            120
                                                125
Ile Cys Asn Pro Leu His Tyr Ser Ser Ile Met Asp Ser Trp Gly Cys
   130
                        135
Phe Gln Leu Ala Leu Ala Ser Trp Leu Ala Gly Phe Leu Ala Pro Ile
                    150
                                        155
Leu Leu Met Ile Leu Ile Phe Arg Leu Thr Phe Cys Ser Ala Asn Glu
                                    170
Ile Asp His Phe Phe Cys Asp Leu Lys Pro Ile Met Lys Leu Ala Cys
                                185
Thr Asn Thr Gln Val Ala Glu Met Thr Ser Phe Ile Cys Thr Ser Leu
        195
                            200
Phe Ala Leu Gly Pro Phe Ile Leu Thr Leu Ala Ser Tyr Ile His Ile
                        215
Ile Cys Thr Ile Leu Arg Ile Pro Ser Thr Thr Gly Lys Gln Arg Ala
                                        235
                    230
Phe Ser Thr Cys Ser Ser His Leu Ile Val Val Ser Leu Tyr Tyr Gly
                                    250
                                                        255
Thr Leu Gly Ile Val Tyr Gly Phe Pro Ser Met Pro Gln Tyr Glu
                                                    270
                                265
```

```
<210> 2366
<211> 134
<212> PRT
<213> Mus musculus
<400> 2366
Lys Leu Pro Cys Gly Asn Val Lys Val Asn Ala Ile Tyr Gly Leu Met
Val Ala Leu Leu Ile Gly Gly Phe Asp Ile Leu Cys Ile Thr Ile Ser
Tyr Ile Met Ile Leu Arg Ala Val Val Ser Leu Ser Ser Ala Asp Ala
Arg Gln Lys Ala Phe Ser Thr Cys Thr Ala His Ile Cys Ala Ile Val
Phe Ser Tyr Ser Pro Thr Phe Leu Ser Phe Phe Ser His His Phe Gly
Gly His Thr Ile Pro Pro Ser Cys His Ile Ile Val Ala Asn Ile Tyr
                                    90
Leu Leu Pro Pro Thr Met Asn Pro Val Val Tyr Gly Val Lys Thr
                                105
Lys Gln Ile Gln Asp Cys Val Ile Arg Ile Phe Ser Glu Ser Lys Asp
        115
                            120
Ser Lys Ala His Gly Ile
    130
<210> 2367
<211> 125
<212> PRT
<213> Mus musculus
<400> 2367
Leu Ala Cys Gln Asp Thr Gly Arg Asn Arg Gly Pro Arg Cys Leu Trp
Pro Glu Pro Ile Ile Leu Val Phe Pro Ala Thr Leu Ile Leu Gly Ser
                                25
Tyr Gly His Ile Ala Lys Ala Val Leu Lys Val Lys Ser Thr Ala Gly
Arg Arg Lys Ala Phe Gly Thr Cys Gly Ser His Leu Leu Val Val Ser
Leu Phe Tyr Gly Ser Ala Ile Tyr Thr Tyr Leu Gln Pro Lys Ser Ser
Tyr Ser Glu Ser Asp Gly Lys Phe Val Ala Leu Phe Tyr Thr Ile Val
                                    90
Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val
Lys Gly Ala Leu Trp Lys Val Leu Gly Arg Gly Thr Asp
<210> 2368
<211> 258
<212> PRT
<213> Mus musculus
<400> 2368
```

Trp Thr Ser Gly Leu Arg Thr Pro Met Tyr Phe Phe Leu Arg Gln Leu

```
10
Ala Leu Val Glu Ile Cys Phe Ser Leu Asp Val Ala Pro Arg Leu Leu
                                25
Val Thr Leu Leu Gln Pro Gly Arg Gly Val Ser Pro Thr Ser Cys Ala
                            40
Leu Gln Leu Leu Val Leu Ser Cys Val Thr Ser Glu Cys Phe Leu
                        55
Leu Met Val Met Ala Trp Asp Arg Phe Leu Ala Ile Cys Arg Pro Leu
                    70
                                        75
Arg Tyr Gly Ala Ile Met Ser Pro Gln Leu Cys Tyr Leu Leu Ala Thr
               85
                                    90
Thr Cys Trp Leu Ala Gly Ile Pro Val Ala Leu Val Phe Thr Ile Trp
          100
                                105
                                                    110
Leu Phe Asn Phe Pro Phe Cys Gly Pro Arg Gly Ile Arg His Phe Phe
                            120
       115
                                                125
Cys Asp Ile Ala Pro Leu Leu Ser Leu Val Cys Ala Asp Thr Arg Val
                        135
                                            140
Phe Glu Ala Asn Val Phe Val Ala Thr Val Leu Val Ile Met Val Pro
                    150
                                        155
Phe Cys Leu Ile Ala Thr Ser Tyr Val Met Ile Leu Val Ala Val Leu
                                    170
               165
Arg Met Pro Ser Ala Ser Gly Arg His Lys Ala Leu Ser Thr Cys Ala
           180
                                185
                                                    190
Ser His Leu Ile Val Val Ile Leu Phe Tyr Gly Thr Thr Gly Val Ile
       195
                            200
His Leu Arg Pro Lys Ala Ser Tyr Ser Pro Glu Ser Lys Gln Val Val
                        215
                                            220
Ser Leu Ser Tyr Thr Met Val Thr Pro Met Leu Asn Pro Leu Ile Tyr
                                        235
                   230
Ser Leu Arg Asn Lys Glu Val Lys Ala Ala Phe Gly Arg Val Cys Cys
Gly Arg
```

<210> 2369

<211> 233

<212> PRT

<213> Mus musculus

<400> 2369

Pro Gln Met Leu Ala Ile Phe Trp Phe Arg Val Leu Phe Leu Ala Phe 10 Asp Ala Cys Leu Ala Gln Leu Phe Phe Ile His Ile Leu Gln Gly Met 25 Glu Ser Gly Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Ile Ala Ile 40 Cys Asp Pro Leu Arg His Thr Ser Ile Leu Lys Pro Ser Ile Leu Gly 55 Arg Met Ile Val Val Val Ile Gln Ala Val Val Leu Val Gly Leu 70 75 Leu Pro Ile Leu Ile Lys Arg Leu His His Phe Gln Ser Ile Gln Ile 90 Ala His Ser Tyr Cys Glu His Met Thr Val Val Lys Leu Ala Ala Asn 100 105 Arg Val Gln Val Asn Lys Ile Cys Gly Leu Phe Val Gly Leu Ser Val 120 125 Leu Gly Phe Asp Met Phe Phe Ile Leu Ile Ser Tyr Ala Leu Ile Phe

```
Ala Val Phe His Leu Lys Gln Lys Glu Ala Arg Leu Lys Ala Phe Asn
                    150
Thr Cys Thr Ala His Ile Phe Val Phe Leu Glu Phe Tyr Ile Leu Ala
                                    170
                165
Phe Phe Ser Phe Leu Ser His Arg Leu Gly His Val Val Pro Ser Thr
                                                    190
His Ile Leu Leu Ser Thr Ile Tyr Leu Leu Pro Pro Ala Leu Asn
        195
                            200
Pro Ile Val Tyr Gly Val Lys Ser Met Val Ile Lys Arg Val Ala Gln
                        215
Ile Phe Phe Leu Asp His Ala His Gln
<210> 2370
<211> 180
<212> PRT
<213> Mus musculus
<400> 2370
Met Leu Ser Ser Leu Lys Thr Asn Asn Val Thr Tyr Leu Asn Pro Gly
Thr Val Ile Leu Ile Gly Ile Pro Gly Leu Glu His Val Gln Phe Trp
            20
                                25
Ile Gly Phe Pro Phe Phe Thr Val Cys Leu Val Ala Leu Leu Gly Asn
                            40
Ile Ile Leu Leu Ile Ile Ile Pro Ala Glu His Ser Leu His Gln Pro
                        55
Met Tyr Ile Phe Leu Ala Val Leu Ala Ala Thr Asp Ile Gly Leu Cys
                    70
Ala Ala Ile Ala Pro Lys Met Leu Ala Ile Phe Trp Phe Arg Ala Tyr
                85
                                    90
Ser Met Ala Phe Asp Ala Cys Leu Ala Gln Leu Phe Phe Ile His Thr
                                105
Leu Gln Gly Met Glu Ser Gly Ile Leu Leu Ala Met Ala Phe Asp Arg
        115
                            120
Tyr Ile Ala Ile Cys Asp Pro Leu Arg His Thr Ser Ile Leu Thr Pro
                        135
Leu Leu Gly Arg Met Ile Val Val Val Ile Arg Ala Val Val Leu
                    150
                                        155
Val Gly Leu Leu Pro Ile Val Ile Lys Arg Leu His His Phe Arg Ser
                                    170
Ile Gln Ile Ala
<210> 2371
<211> 312
<212> PRT
<213> Mus musculus
<400> 2371
Ile Glu Lys His Asn Leu Thr Met Val Thr Glu Phe Ile Leu Val Gly
Ile Thr Asp His Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu
            20
                                25
Leu Ile Tyr Leu Ile Ser Leu Ile Gly Asn Leu Gly Met Ile Ile Phe
Thr Met Val Asn Ser Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg
```

```
55
   50
His Leu Ala Thr Thr Val Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys
                                                           80
                   70
                                       75
Met Leu Gln Asn Phe Leu Val Asp Gln Asn Thr Ile Ser Phe His Leu
               8.5
                                   90
Cys Ala Ile Gln Leu Ser Phe Phe Ser Met Phe Ile Ala Cys Glu Ile
                                                   110
                               105
           100
Tyr Ile Leu Ser Ala Met Ser Tyr Asp His Tyr Val Ala Ile Cys Lys
 115
                          120
                                               125
Pro Leu Phe Tyr Met Val Ile Met Ser Lys Arg Leu Cys Trp Val Leu
                       135
                                           140
Val Val Ile Pro Tyr Val Tyr Cys Thr Ile Val Ala Leu Leu Ile Thr
                   150
                                       155
Ile Lys Ile Phe Thr Leu Ser Phe Cys Gly Ser Asn Val Ile Ser His
            165
                                   170
Phe Tyr Cys Asp Ser Leu Pro Leu Leu Ser Leu Val Cys Ser Asn Thr
                                                   190
          180
                               185
Gln Glu Ile Glu Val Val Leu Leu Tyr Leu Ser Ala Phe Asn Leu Ile
195
                           200
                                               205
Ser Ser Leu Leu Val Leu Val Ser Tyr Leu Leu Ile Leu Ile Ala
                       215
                                           220
Ile Leu Arg Met Asn Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                   230
                                       235
Gly Ser His Leu Thr Met Val Thr Val Phe Tyr Gly Thr Leu Ile Phe
               245
                                   250
Met Tyr Met Gln Pro Lys Ser Asn His Ser Phe Asp Thr Asp Lys Val
                               265
                                                   270
           260
Ala Ser Ile Phe Tyr Thr Met Val Ile Pro Met Phe Asn Pro Leu Ile
                           280
                                              285
Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Leu Leu Arg Thr Trp
                       295
Lys Lys Lys Tyr Met Val Phe Phe
                    310
<210> 2372
<211> 314
<212> PRT
<213> Mus musculus
<400> 2372
Met Gly Gln Gln Asn Thr Thr Ser Leu Pro Gly Phe Ile Leu Met Gly
                                   10
1
Ile Thr Gln Arg Thr Glu Leu Gln Leu Pro Leu Phe Gly Ala Phe Phe
```

2.5 Ile Ile Tyr Ala Val Thr Val Met Gly Asn Leu Gly Met Ile Ile Leu Thr Lys Leu Asp Ser His Leu Glu Thr Pro Met Tyr Phe Phe Ile Arg His Leu Ala Phe Ile Asp Leu Gly Asn Ser Thr Val Ile Cys Pro Lys Met Leu Val Asp Phe Val Met Asn Asp Lys Thr Ile Ser Phe Cys Glu Cys Ala Thr Gln Leu Ser Phe Leu Pro Val Met Phe Ile Ile Thr Glu Phe Phe Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Leu Tyr Ser Val Ile Met Ser Gln Arg Leu Cys His Val

Leu Val Gly Ile Pro Tyr Leu Tyr Ser Thr Val Gln Ala Leu Leu Val 150 Thr Ser Arg Ile Phe Thr Ser Thr Phe Cys Gly Ser Asn Ile Ile Ser 170 His Phe Tyr Cys Asp Gly Ile Phe Leu Leu Pro Met Leu Cys Ser Asn 185 190 Ala Glu Glu Ile Gln Leu Val Ile Ile Ser Phe Ser Ala Leu Asn Leu 200 Ile Ser Ser Phe Leu Val Val Leu Gly Ser Tyr Val Leu Ile Leu Ile 215 Ala Ile Cys Arg Met His Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser 230 235 Thr Cys Gly Ser His Leu Thr Val Val Val Phe Tyr Gly Thr Leu 250 Phe Phe Met Tyr Leu Gln Pro Lys Ser Thr Asp Ser Leu Glu Asn Asp 265 Lys Ile Ala Ser Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro 280 Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Tyr Arg 295 Val Leu Lys Gly Gln Phe Lys Ile Asn Thr

<210> 2373

<211> 305

<212> PRT

<213> Mus musculus

<400> 2373

Met Glu Leu Asn Arg Thr Gln Leu Thr Glu Phe Val Leu Arg Gly Ile Thr Asp Arg Ser Glu Leu Gln Val Pro Leu Phe Leu Val Phe Phe Leu 25 Ile Tyr Val Ile Thr Met Val Gly Asn Leu Gly Leu Ile Phe Val Ile 40 Trp Lys Asp Pro His Leu His Thr Pro Met Tyr Leu Phe Leu Gly Asn 55 Leu Ala Phe Ala Asp Ala Cys Asn Ser Ser Ser Val Thr Pro Lys Met 75 Leu Met Lys Phe Leu Asn Lys Asn Asp Met Ile Ser Met Gly Glu Cys Phe Ala Gln Phe Tyr Phe Phe Cys Ser Ser Val Thr Ala Glu Ala Phe 105 Ile Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 Leu Leu Tyr Val Val Val Met Ser Asn Arg Leu Cys Ile Gln Phe Ile 135 Gly Val Ser Tyr Leu Ile Gly Leu Leu His Gly Leu Leu His Val Gly 155 150 Leu Leu Phe Arg Leu Thr Phe Cys Ser Ser Asn Val Ile Asp His Phe 170 Tyr Cys Asp Ile Leu Pro Leu Tyr Arg Ile Ser Cys Thr Asp Pro Ser 180 185 Ile Asn Val Leu Val Ala Phe Ile Met Gly Ile Leu Ile Gln Val Ser 200 Thr Phe Met Ser Ile Ile Val Ser Tyr Val Arg Val Leu Phe Ala Ile 215 220 Leu Arg Thr Lys Ser Glu Arg Gly Arg Asn Lys Ala Phe Ser Thr Cys

```
230
225
                                        235
Ser Ser His Leu Ser Ser Val Ser Leu Phe Tyr Gly Thr Leu Phe Ile
                245
                                    250
Ile Tyr Val Leu Ser Gly Ser Asp Thr Asp Asn Tyr Gln Gly Lys Met
                                265
                                                   270
Tyr Ser Leu Phe Tyr Thr Ile Ile Ile Pro Leu Leu Asn Pro Phe Ile
                            280
                                                285
Tyr Ser Leu Arg Asn Lys Glu Val Ile Gly Ala Leu Arg Lys Leu Arg
                        295
                                            300
Glu
305
<210> 2374
<211> 272
<212> PRT
<213> Mus musculus
<400> 2374
Met Glu Met Asp Asn Thr Thr Leu Leu Ile Gln Phe Val Leu Ser Gly
                                    10
Leu Val His Leu Pro Gln Trp Lys Ile Pro Leu Phe Leu Leu Phe Leu
Val Ile Tyr Leu Ile Thr Ile Val Gly Asn Leu Gly Leu Ile Thr Leu
       35
                            40
Ile Trp Asn Asp Pro His Leu His Ile Pro Met Tyr Phe Phe Leu Gly
                        55
                                            60
Ser Leu Ala Phe Val Asp Thr Trp Leu Ser Ser Thr Val Thr Pro Lys
                    70
                                        75
                                                            80
Met Leu Gln Asp Ile Phe Ala Lys Asn Lys Met Ile Ser Phe Ser Glu
               85
                                    90
Cys Met Ile Gln Phe Phe Ser Phe Gly Ile Ser Ala Thr Thr Glu Cys
                                105
Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu Leu Tyr Pro Val Ile Met Thr Asn Arg Leu Cys Val Arg Leu
                        135
                                            140
Leu Thr Leu Ser Phe Val Gly Gly Phe Ile His Ala Leu Ile His Glu
                    150
                                        155
Gly Phe Leu Phe Arg Leu Ile Phe Cys Ser Ser His Ile Ile Asp His
                165
                                    170
                                                         175
Phe Tyr Cys Asp Val Met Pro Leu Leu Lys Ile Ser Cys Asn Asp Pro
         . 180
                                185
                                                    190
Ser Ile Asn Tyr Leu Met Leu Phe Ile Phe Ser Gly Ser Ile Gln Val
       195
                            200
                                                205
Phe Thr Ile Thr Thr Ile Leu Val Ser Tyr Thr Leu Val Leu Phe Ser
   210
                        215
Ile Leu Lys Gln Lys Ser Leu Lys Ser Ile Lys Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ala His Leu Leu Ser Val Ser Leu Tyr Tyr Gly Pro Leu Leu
                245
                                    250
Phe Met Tyr Val Arg Pro Ala Ser Pro Gln Val Asn Asp Glu Asp Met
            260
                                265
<210> 2375
<211> 156
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<212> PRT

<213> Mus musculus

```
<400> 2375
Leu Met His Thr Leu Leu Ala Ala Arg Leu Ser Phe Cys Glu Asn Asn
Val Ile Leu Asn Phe Phe Cys Asp Leu Phe Val Leu Leu Lys Leu Ala
Cys Ser Asp Thr Tyr Val Asn Glu Leu Met Ile Phe Ile Met Ser Ser
        35
Leu Leu Ile Val Ile Pro Phe Phe Leu Ile Val Met Ser Tyr Ala Arg
Ile Ile Ala Ser Ile Leu Lys Val Pro Ser Ile Gln Gly Ile Tyr Lys
                                        75
Val Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Thr Leu Phe Tyr
                                    90
Gly Thr Ile Ile Gly Leu Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr
                                105
Val Lys Gly Thr Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met
                            120
Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Arg Ala
Leu Ile Arg Val Ile Cys Ser Lys Lys Ile Ser Leu
                    150
<210> 2376
<211> 152
<212> PRT
<213> Mus musculus
<400> 2376
Met Asp Tyr Leu Asn Thr Ser Ser Glu Glu Gly Phe Ile Leu Val Gly
Phe Ser Asp Trp Pro His Leu Glu Pro Ile Leu Phe Ala Phe Ile Ser
Met Phe Tyr Ser Leu Thr Leu Phe Gly Asn Thr Val Ile Ile Ile Leu
Ser Gln Leu Asp Leu Arg Leu His Thr Pro Met Tyr Tyr Phe Leu Cys
His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Ala Ser Thr Val Pro Gln
                    70
Leu Leu Val Asn Leu Ser Gly Leu Asp Arg Thr Ile Ser Phe Gly Arg
                                    90
Cys Val Ala Gln Leu Phe Ile Met Leu Ser Leu Gly Gly Ile Glu Cys
Val Leu Leu Val Ala Met Ala Ile Asp Arg Tyr Ala Ala Val Cys Arg
                            120
Pro Leu His Tyr Thr Thr Ile Met His Pro Val Leu Cys Arg Ala Leu
Val Val Phe Ser Trp Val Gly Gly
<210> 2377
<211> 191
<212> PRT
<213> Mus musculus
```

Met Ala Leu Arg Asn Ala Ser Ser Val Lys Glu Phe Ile Leu Leu Gly

<400> 2377

```
Leu Thr Gln Gln Pro Gly Leu Gln Leu Pro Leu Phe Phe Leu Phe Leu
Gly Ile Tyr Val Val Ser Met Leu Gly Asn Leu Gly Leu Ile Val Leu
Ile Val Leu Asn Pro His Leu His Thr Pro Met Tyr Tyr Phe Leu Phe
Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Arg
                    70
Met Leu Val Gly Phe Val Lys Gln Asn Ile Ile Ser His Ala Glu Cys
Leu Thr Gln Leu Phe Phe Phe Ala Phe Phe Val Ile Asp Glu Cys Tyr
                                105
Ile Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys Pro
                            120
        115
Leu Leu Tyr Gln Val Thr Met Ser His Gln Val Cys Leu Leu Met Thr
                        135
                                            140
Met Gly Val Tyr Val Met Gly Leu Ala Gly Ala Leu Ser His Ile Val
                    150
                                        155
Cys Met Leu Arg Leu Thr Phe Cys Asp Gly Asn Ile Ile Asn His Tyr
                165
                                    170
Val Cys Asp Val Leu Pro Leu Leu Lys Leu Ser Cys Thr Ser Thr
```

<210> 2378 <211> 210 <212> PRT <213> Mus musculus

<400> 2378

Met Lys Tyr Leu Asn Thr Ser Ser Glu Asp Gly Phe Ile Leu Val Gly Phe Ser Asp Trp Pro His Val Glu Pro Ile Leu Phe Ala Ile Ile Ser Ile Phe Ser Ser Leu Thr Leu Phe Gly Asn Thr Val Ile Thr Ile Leu Ser Leu Asp Leu His Leu His Thr Pro Met Tyr Cys Phe Leu Cys His 55 Leu Ser Phe Leu Asp Leu Cys Tyr Thr Ala Ser Thr Val Pro Gln Leu Leu Val Asn Leu Ser Gly Leu Asp Arg Thr Ile Ser Phe Gly Lys Cys Val Ala Gln Leu Cys Ile Val Leu Ser Leu Gly Gly Thr Glu Cys Val 100 Leu Leu Val Thr Met Ala Ile Asp Cys Tyr Ala Ala Val Cys Arg Pro 120 Leu His Tyr Thr Thr Ile Met His Pro Val Leu Cys Arg Ala Leu Val Val Phe Ser Trp Val Gly Gly Leu Val Asn Ser Leu Ile Gln Thr Ser 150 155 Leu Val Met Ala Met Pro Leu Cys Gly His Gln Leu Asn His Phe Phe 170 Cys Glu Leu Pro Val Leu Leu Lys Met Ala Cys Glu Asp Thr Gly Gly 185 Thr Glu Val Asn Ser Phe Val Ala Arg Val Ile Ile Leu Val Cys Pro 200 Leu Leu

Leu Leu 210

```
<210> 2379
<211> 177
<212> PRT
<213> Mus musculus
<400> 2379
Ser His Lys Val Cys Trp Leu Leu Val Thr Met Thr Tyr Leu Tyr Cys
Thr Phe Met Ser Leu Val Val Thr Ile Asn Ile Phe Ser Leu Ser Phe
                                25
Cys Gly Tyr Asn Val Ile Asn His Phe Phe Cys Asp Cys Ile Pro Leu
Ile Ser Leu Leu Cys Ser Asn Thr Gln Glu Val Glu Leu Ile Val Met
Phe Phe Ala Ala Phe Asp Leu Ile Ser Ser Leu Val Val Leu Met
                    70
Tyr Tyr Leu Leu Ile Phe Ile Ala Val Leu Arg Met Asn Ser Ala Glu
Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val
            100
                                105
Thr Leu Phe Tyr Gly Thr Leu Ile Phe Met Tyr Val Lys Pro Val Ser
       115
                            120
Ser His Ser Ile Asp Thr Glu Lys Ile Ser Ser Ile Leu Tyr Thr Leu
                        135
Ile Ile Pro Leu Leu Asn Pro Leu Val Tyr Ser Leu Arg Asn Lys Asp
                    150
                                        155
Val Lys Glu Ala Leu Gln Arg Thr Cys Gln Lys Ile Phe Asn Thr Phe
                                    170
Ser
<210> 2380
<211> 129
<212> PRT
<213> Mus musculus
<400> 2380
Leu Asn Gln Leu Ser Gln Leu Thr Cys Ser Asp Ser Phe Ser Ser Gln
Leu Ile Met Asn Leu Val Pro Val Leu Leu Ala Val Ile Ser Phe Ser
                                25
Ser Ile Leu Tyr Ser Tyr Phe Lys Ile Val Ser Ser Ile Cys Ser Ile
                            40
Ser Ser Val Gln Gly Lys Tyr Lys Ala Phe Ser Thr Cys Val Ser His
                        55
Leu Ser Ile Val Ser Leu Phe Tyr Ser Thr Gly Leu Gly Val Tyr Val
```

Ser Ser Val Val Ile Gln Ser Ser His Ser Ala Ala Arg Ala Ser Val

Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu 100 105 110 Arg Asn Lys Asp Val Lys Lys Ala Val Glu Arg Leu Leu Glu Gly Lys

Leu

```
<210> 2381
<211> 168
<212> PRT
<213> Mus musculus
<400> 2381
Met Ala Lys Asn Asn Ala Thr Thr Ile Asn Gly Phe Ile Leu Met Gly
1
Phe Ser Asp His Pro Lys Glu Ile Pro Leu Leu Leu Val Phe Leu Ser
Phe Tyr Leu Val Thr Met Leu Gly Asn Leu Gly Met Val Ile Phe Ile
                            40
His Val Asp Val Gln Leu His Ile Pro Met Tyr Phe Phe Leu Ser His
Leu Ser Val Leu Asp Ala Cys Tyr Thr Ser Val Ile Thr Pro Gln Ile
                    70
Leu Ala Thr Leu Ala Thr Gly Lys Thr Val Ile Ser Tyr Gly Cys Cys
                                    90
                                                         95
Ala Thr Gln Phe Phe Phe Thr Ile Tyr Ala Gly Thr Glu Cys Phe
            100
                                105
                                                     110
Thr Asn Thr Phe Ser Leu Ser Phe Cys Glu Asn Gln Ser Ile Phe Phe
        115
                            120
Phe Phe Tyr Asp Leu Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr
                        135
Ile Asn Met Val Glu Ile Ile Ile Val Phe Phe Gly Asn Phe Val Ile
                    150
Leu Ala Asn Tyr Cys Val Pro Leu
                165
<210> 2382
<211> 109
<212> PRT
<213> Mus musculus
<400> 2382
Leu Val Leu Ala Phe His Ser Gln Tyr Arg Ser His Leu Ile Leu Tyr
                                    10
1
Leu Leu Ile Ile Arg Val Val Met Arg Met Lys Ser Ser Gly Arg Arg
                                25
                                                     30
Ala Lys Thr Phe Ser Thr Cys Val Ser His Leu Thr Ala Val Ala Leu
                            40
Leu Leu Gly Thr Leu Gly Phe Met Tyr Ile Arg Ser Gly Ser Glu Asp
                        55
Lys Gly Met Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                    70
                                         75
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Phe Lys Lys
                                    90
                                                         95
Ile Thr Gly Lys Cys Gln Phe Ser His Ser Thr Gln His
            100
                                105
<210> 2383
<211> 194
<212> PRT
<213> Mus musculus
<400> 2383
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Arg Tvr Val Ala Ile Cys Thr Pro Leu Arg Tyr Ala Ile Ile Ile Thr Pro Lys Leu Cys Thr Gln Leu Ser Thr Gly Ser Phe Thr Leu Gly Phe Leu Met Leu Leu Pro Glu Ile Val Trp Ile Ser Thr Leu Pro Phe Cys 40 Gly Pro Asn Gln Ile His Gln Leu Phe Cys Asp Leu Glu Pro Met Leu Leu Leu Ala Cys Thr Asp Thr Ser Met Ile Leu Val Glu Asp Val Ile 70 His Ala Ile Ser Ile Leu Ser Cys Val Ser Ile Ile Ser Leu Ser Tyr 90 Leu Arg Ile Ile Thr Val Val Leu Lys Ile Pro Ser Gly Glu Ser Arg 105 Gln Lys Ala Phe Ser Thr Cys Thr Ala His Ile Thr Ile Phe Val Leu 120 Phe Phe Gly Ser Val Ala Leu Met Tyr Leu Arg Phe Ser Val Thr Phe 140 Gln Pro Leu Leu Glu Lys Val Ile Ala Leu Met Phe Ala Val Leu Ala Pro Phe Phe Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys 170 Asp Ala Ile Lys Lys Met Phe Gly Ser Gln Lys Ile Leu Thr Val Ser 180 185 Gly Ser

<210> 2384 <211> 164 <212> PRT

<213> Mus musculus

<400> 2384

Met Thr Ala Arg Asn Met Thr Thr Met Ser Gly Phe Leu Leu Val Gly Phe Ser Asp Asn His Glu Leu Gln Ile Leu Gln Ala Leu Leu Phe Leu Val Thr Tyr Leu Leu Gly Ser Ala Gly Asn Phe Ile Ile Thr Ile 40 Thr Thr Leu Asp Pro Gln Leu Gln Ser Pro Met Tyr Tyr Phe Leu Lys 60 His Leu Ser Ile Leu Asp Leu Ser Ser Leu Ser Val Thr Ile Pro Gln 70 75 Tyr Val Asp Ser Ser Leu Ala Arg Ser Gly Tyr Ile Ser Tyr Ala Gln 90 85 Cys Met Leu Gln Ile Phe Phe Phe Ala Ser Phe Ala Trp Gly Glu Leu 100 105 110 Gly Thr Leu Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Leu 120 Pro Leu His Tyr Glu Val Ile Met Ser Pro Arg Lys Cys Thr Trp Ala 135 140 Val Ala Ala Val Trp Leu Ser Gly Arg Tyr Leu Gly Thr Leu Phe Thr 150 155 Ala Ser Thr Leu

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<211> 106
<212> PRT
<213> Mus musculus
<400> 2385
Leu Tyr Gly Gly Ile Asn Phe Leu Leu Thr Leu Leu Ser Tyr Gly Cys
                                    10
Ile Ile Ala Ser Ile Leu His Met Arg Ser Ala Glu Gly Lys Arg Lys
                                25
Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr
Ser Ser Leu Phe Cys Ala Tyr Ile Ser Pro Ala Ser Ser Tyr Ser Pro
                        55
Glu Arg Ser Lys Phe Thr Ser Phe Phe Tyr Ser Val Leu Ser Pro Thr
                    70
                                         75
Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala
                                     90
Leu Arg Arg Leu Leu Pro Ser Leu Ser Asn
            100
<210> 2386
<211> 302
<212> PRT
<213> Mus musculus
<400> 2386
Glu Lys Lys Asn His Thr Val Val Ser Glu Phe Leu Phe Gln Gly Phe
                                     10
Ser Ser Phe Gln Glu Tyr Lys Phe Thr Leu Phe Met Val Phe Leu Thr
Leu Tyr Leu Leu Thr Leu Thr Ser Asn Ala Ile Ile Met Ile Ile Ile
Gly Ile Glu Cys His Arg His Thr Pro Met Tyr Phe Phe Leu Ser Met
                        55
Ile Ser Thr Ser Glu Thr Val Tyr Thr Leu Val Ile Val Pro Ser Met
                    70
Leu Ala Ser Leu Val Gly Ser Ser Gln Ser Ile Ser Leu Ala Gly Cys
                                     90
Ala Thr Gln Met Phe Val Phe Ile Thr Leu Ala Ile Asn Asn Cys Phe
                                105
Leu Leu Thr Ala Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                            120
                                                 125
Leu Arg Ser Ser Val Ile Met Asn Lys Arg Val Cys Ala Gln Leu Val
                        135
                                             140
Trp Gly Ser Cys Asn Ile Gly Leu Gln Ile Ala Ser Val Phe Arg Ala
                    150
Pro Phe Cys Asp Arg Glu Val Ala His Tyr Phe Cys Asp Pro Val Met
                                    170
                165
Lys Leu Ser Cys Ala Asp Thr Thr Leu His Asp Ile Val Asn Phe Ile
            180
                                185
                                                     190
Ile Ser Ser Leu Val Ile Val Val Pro Met Gly Leu Val Phe Ile Ser
        195
                            200
                                                 205
Tyr Ile Leu Ile Ile Ser Thr Ile Leu Lys Ile Ala Ser Ala Glu Gly
    210
                        215
                                             220
Arg Lys Lys Ala Phe Ala Thr Cys Ala Ser His Leu Thr Val Val Ile
                    230
                                         235
Ile His Tyr Gly Cys Ala Ser Ile Ala Tyr Leu Lys Pro Lys Ser Glu
```

250

245

```
Asn Thr Arg Asp Gln Asp Gln Leu Ile Ser Val Thr Tyr Thr Val Phe
            260
                                 265
Asn Pro Leu Leu Asn Pro Val Val Tyr Thr Leu Arg Asn Lys Glu Val
        275
                             280
Lys Asp Ala Ile Tyr Arg Ala Ile Gly Lys Lys Pro Phe Ala
    290
                        295
<210> 2387
<211> 238
<212> PRT
<213> Mus musculus
<400> 2387
Met Glu Pro Tyr Asn Leu Thr Gly Thr Leu Glu Phe Ile Leu Leu Gly
Leu Ser Glu Asp Pro Glu Leu Gln Leu Ile Leu Phe Ala Leu Phe Leu
            20
Leu Ile Tyr Met Leu Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
                             40
Ile Ser Ser Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Tyr
                        55
Asn Leu Ser Leu Ser Asp Met Gly Phe Ser Ser Thr Thr Ile Pro Lys
                    70
                                         75
Met Leu Ile Asn Leu His Ala His Asn Arg Ser Ile Thr Tyr Ala Glu
                                    90
Cys Leu Thr Gln Val Ser Phe Phe Phe Leu Phe Gly Gly Met Asp Ser
            100
                                 105
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Trp Val Ala Ile Cys His
                            120
Pro Leu Tyr Tyr Gln Val Ile Leu Ser Pro Cys Leu Cys Arg Cys Leu
                        135
Val Ile Val Ser Leu Phe Ile Ser Leu Val Ser Ser Gln Val His Cys
                    150
                                         155
Leu Leu Val Ser Gln Leu Thr Phe Cys Ile Asn Val Glu Ile Pro His
                                    170
                                                         175
Phe Phe Cys Asp Val Pro Glu Leu Val Lys Leu Ala Cys Ser Asn Thr
            180
                                185
                                                     190
Thr Ile Ser Asp Ile Val Ile Phe Leu Leu Gly Ile Ile Leu Gly Phe
        195
                            200
Leu Pro Ala Ser Gly Ile Phe Tyr Ser Tyr Tyr Lys Ile Thr Ser Ser
                        215
                                             220
Ile Phe Arg Val Pro Ser Leu Leu Gly Lys Tyr Lys Ala Phe
225
                    230
                                         235
<210> 2388
<211> 290
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (186)...(208)
<223> Any amino acid
<400> 2388
Met Arg Gly Asp Asn His Ser Cys Phe Trp Asp Thr Pro Lys Asp Phe
                                    10
```

```
Ile Leu Leu Gly Ile Ser Asp Arg Pro Trp Leu Glu Leu Pro Val Phe
Ala Val Leu Leu Val Phe Tyr Ile Leu Ala Met Leu Gly Asn Ile Ser
                            40
Ile Ile Leu Val Ser Gln Leu Asp Pro Gln Leu His Ser Pro Met Tyr
                        55
Ile Phe Leu Ser His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Thr
Thr Val Pro Gln Met Leu Phe Asn Met Gly Ser Ser Gln Lys Thr Ile
                                    90
Ser Tyr Gly Gly Cys Thr Val Gln Tyr Ala Ile Phe His Trp Leu Gly
                                105
            100
Cys Thr Glu Cys Val Val Leu Ala Ala Met Ala Leu Asp Arg Tyr Val
                            120
                                                125
Ala Ile Cys Glu Pro Leu Arg Tyr Ala Ile Ile Met His Arg Pro Leu
                        135
Cys Gln Gln Leu Val Ala Met Ala Trp Leu Ser Gly Phe Gly Asn Ser
                    150
                                        155
Leu Val Gln Val Ile Leu Thr Val Gln Leu Pro Phe Cys Gly Arg Gln
                                    170
Val Leu Asn Asn Phe Phe Cys Glu Val Xaa Xaa Xaa Xaa Xaa Xaa
                                185
                                                    190
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Phe Xaa Xaa Xaa Xaa Xaa Xaa
                            200
                                                205
Gly Arg His Lys Ala Phe Gly Thr Cys Ser Ser His Leu Leu Val Val
    210
                        215
                                            220
Ser Leu Phe Tyr Leu Pro Ala Ile Tyr Met Tyr Leu Gln Pro Pro Ser
                    230
                                        235
Ser Tyr Ser Gln Glu Gln Gly Lys Phe Ile Ser Leu Phe Tyr Ser Ile
                245
                                    250
Ile Thr Pro Thr Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys Asp
                                265
Val Lys Gly Ala Leu Arg Arg Leu Leu Ala Arg Thr Gly Arg Leu Cys
                            280
                                                285
Gly Arg
    290
```

<210> 2389

<211> 250

<212> PRT

<213> Mus musculus

<400> 2389

Leu Ser Phe Ile Asp Ile Cys Tyr Ser Ser Ser Ile Ser Pro Arg Ile 10 Leu Ser Asp Phe Leu Lys Thr Glu Lys Thr Ile Ser Phe Ile Ala Cys 20 Ala Thr Gln Asn Phe Val Leu Ala Trp Met Gly Ala Ser Glu Cys Cys 35 40 Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Gly Ser Pro 55 Leu Gln Tyr Ser Ala Ile Met Ala Pro Ser Leu Cys Trp Arg Met Val 70 75 Ala Gly Val Tyr Gly Ser Gly Phe Phe Ile Ser Phe Val Gln Gln Ser 85 90 95 Ala Cys Phe Asn Leu Tyr Tyr Cys Gly Pro Asn Val Ile Arg His Phe 105 Phe Cys Asp Ile Pro Gln Ile Ile Pro Leu Ser Cys Ser Asp Pro Phe

```
115
                            120
Ile Ser Gln Leu Val Leu Phe Leu Ala Ala Leu Phe Val Gly Phe Gly
                                             140
                        135
Ser Phe Leu Val Ile Ile Phe Ser Tyr Val Phe Ile Ala Val Ser Ile
                    150
                                        155
Leu Lys Val Ala Ser Phe Glu Gly Arg Val Lys Ala Phe Lys Thr Cys
                165
                                    170
Gly Ser His Leu Ala Ala Val Thr Leu Phe Tyr Gly Thr Gly Leu Ser
Val Tyr Met His His Ser Ser Gln His Ser Thr Lys Gln Asp Lys Val
        195
                            200
Leu Ser Val Val Tyr Thr Ile Leu Ile Pro Met Val Asn Pro Leu Ile
                        215
Tyr Ser Leu Arg Asn Thr Glu Ile Lys Glu Ala Leu Lys Arg Val Leu
                    230
Lys Lys Ala Ala His Leu Pro Gln Lys Ala
<210> 2390
<211> 301
<212> PRT
<213> Mus musculus
<400> 2390
Met Trp Pro Ser Val Ile Ala Ile Tyr Leu Phe Gly Trp Asp Ser Gln
1
                                    10
Val Ser Arg Asp Phe Lys Thr Val Phe Leu Phe Pro Val Leu Thr Tyr
                                25
Met Leu Ser Ile Gly Gly Asn Gln Asn Thr Asp Ala Phe Thr Leu His
Glu Ser His Phe Gln Val Pro Met His Phe Val Phe Arg Ser Phe Ser
Phe Leu Glu Ile Ser Leu Thr Ser Thr Phe Ile Pro Gln Leu Leu Phe
Ser Val Ser Thr Gly Ile Lys Thr Ile Ser Phe Val Gly Cys Phe Ile
                                    90
Ala Ile Phe Phe Gly Thr Thr Glu Ile Trp Thr Leu Thr Ser Met Thr
            100
                                105
Cys Asp Tyr Tyr Ile Ala Thr Ser Gln Ser Leu His Tyr Ala Thr Ile
        115
                            120
                                                 125
Met Ser Asn Arg Val Cys Thr Leu Leu Ile Pro Cys Ser Cys Leu Ser
```

135 140 Cys Phe Leu Ile Ile Phe Leu Pro Ile Ile Leu Thr Ser Gln Leu Asp 150 155 Phe Cys Ala Ser Asn Val Leu Lys His His Cys Cys Asp Tyr Gly Thr 170 175 Leu Ile Glu Ile Ala Cys Ser Ser Thr Arg Leu Met Glu Leu Phe Val 190 Phe Phe Leu Val Ile Met Thr Leu Arg Val Ala Met Val Leu Val Ala 195 Leu Ser Tyr Met Cys Ser Ile Arg Thr Ile Pro Lys Ile Pro Ser Ala 215 220 Gln Arg Lys Lys Ala Phe Cys Ser Ser His Thr Leu Val Ile Ser Ile 230 235 Ser Tyr Arg Ser Cys Ile Phe Met Cys Ile Lys Pro Ser Ser Arg Gly 245 250 255 Val Val Leu Ser Lys Gly Met Ala Val Leu Asn Thr Ser Val Ala Pro 265 270

```
Leu Leu Asp Leu Phe Ile Tyr Thr Phe Arg Asn Lys Gln Leu Lys Lys
        275
                            280
Ser Phe Asn Asp Ile Thr Arg Lys Thr Val Ile Leu Gln
    290
                        295
<210> 2391
<211> 304
<212> PRT
<213> Mus musculus
<400> 2391
Phe Thr Glu Val Ile Glu Phe Val Phe Leu Gly Phe Ser Ser Phe Gly
Lys His Gln Ile Thr Leu Phe Val Val Phe Leu Thr Ile Tyr Ile Leu
                                25
Thr Leu Ala Gly Asn Ile Ile Ile Val Thr Ile Thr His Ile Asp His
His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Met Leu Ala Ser Ser
                        55
Glu Thr Val Tyr Thr Leu Val Ile Val Pro Arg Met Leu Ser Ser Leu
                                        75
Ile Phe Tyr Asn Leu Pro Ile Ser Leu Ala Gly Cys Ala Thr Gln Met
                85
Phe Phe Phe Val Thr Leu Ala Thr Asn Asn Cys Phe Leu Leu Thr Ala
                                105
Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Thr
        115
                            120
Ile Ile Met Ser Lys Gly Met Cys Ala Leu Leu Val Cys Gly Ser Leu
                        135
                                             140
Gly Thr Gly Leu Val Met Ala Val Leu His Val Pro Ala Met Phe His
                    150
                                        155
Leu Pro Phe Cys Gly Thr Val Val Glu His Phe Phe Cys Asp Ile Tyr
                165
                                    170
                                                         175
Pro Val Met Lys Leu Ser Cys Val Asp Thr Thr Val Asn Glu Ile Ile
            180
                                185
                                                    190
Asn Tyr Gly Val Ser Ser Phe Val Ile Leu Val Pro Ile Gly Leu Ile
        195
                            200
Phe Ile Ser Tyr Val Leu Ile Val Ser Ser Ile Leu Lys Ile Val Ser
                        215
                                             220
Thr Glu Gly Gln Lys Lys Ala Phe Ala Thr Cys Ala Ser His Leu Thr
                    230
                                        235
Val Val Ile Val His Tyr Gly Cys Ala Ser Ile Ala Tyr Leu Lys Pro
                245
                                    250
                                                         255
Lys Ser Glu Ser Ser Val Glu Lys Asp Leu Leu Ser Val Thr Tyr
                                265
                                                     270
Thr Ile Ile Thr Pro Leu Leu Asn Pro Val Val Tyr Ser Leu Arg Asn
                            280
Lys Glu Val Lys Asp Ala Leu Cys Arg Ala Val Gly Arg Asn Thr Ser
    290
<210> 2392
<211> 160
<212> PRT
<213> Mus musculus
```

Ile Val Ser Leu Leu Val Asn Ile Lys Ile Phe Thr Leu Ser Phe Cys

<400> 2392

```
Gly Tyr Asn Val Ile Arg His Phe Tyr Cys Asp Ala Leu Pro Leu Leu
                                25
Thr Leu Ala Cys Ser Asn Thr His Glu Ile Glu Ala Ile Ile Leu Ile
Phe Ser Ala Phe Asn Leu Leu Ser Ser Leu Leu Ile Val Ile Gly Ser
Tyr Leu Leu Ile Leu Met Ala Ile Leu Arg Ile Asn Ser Ala Glu Gly
Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Ile
                                    90
Val Phe Tyr Gly Thr Leu Ile Phe Met Tyr Leu Gln Pro Thr Phe Thr
            100
                                105
His Ser Ile Asp Thr Gly Lys Val Ile Ser Ile Phe Tyr Thr Gln Val
        115
                            120
Ile Pro Met Leu Asn Pro Leu Thr Tyr Ser Leu Arg Asn Lys Asp Val
                        135
Lys Asp Val Leu Lys Lys Pro Met Glu Lys Val His Asn Leu Phe Ser
                    150
<210> 2393
<211> 115
<212> PRT
<213> Mus musculus
<400> 2393
Ile Leu Ile Phe Ser Ala Phe Asn Leu Leu Ser Ser Leu Leu Ile Val
                                    10
Ile Gly Ser Tyr Leu Leu Ile Leu Met Thr Ile Leu Arg Ile Asn Ser
                                25
Ala Lys Gly Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr
                            40
Val Val Ile Val Phe Tyr Gly Thr Leu Ile Phe Met Tyr Leu Gln Pro
                        55
Thr Ser Thr His Ser Ile Asn Thr Val Lys Val Thr Ser Ile Phe Tyr
Thr Gln Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn
Lys Asp Val Lys Asp Val Leu Lys Lys Thr Lys Glu Lys Val Tyr Asn
Leu Val Ser
        115
<210> 2394
<211> 242
<212> PRT
<213> Mus musculus
<400> 2394
Met Glu Asp Met Ala Ala Gly Asn His Cys Thr Val Thr Glu Phe Phe
Leu Ala Gly Leu Ser Glu Lys Pro Glu Leu Gln Leu Pro Leu Phe Leu
Leu Phe Thr Gly Ile Tyr Leu Ile Thr Met Ala Gly Asn Leu Gly Met
                            40
Ile Thr Leu Ile Gly Leu Ser Ser His Leu His Thr Pro Met Tyr Tyr
                        5.5
```

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Phe Leu Ser Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Val
                    70
Ile Pro Lys Met Leu Val Ser Phe Leu Thr Glu Met Asn Ile Ile Ser
                                    90
Tyr Ser Glu Cys Met Ala Gln Leu Tyr Phe Phe Leu Thr Phe Gly Ile
                                105
            100
Ala Glu Cys Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala
                            120
Ile Cys Asn Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Tyr
   130
                        135
                                            140
Ser Ser Leu Ile Ser Gly Val Tyr Ile Phe Ala Val Ile Cys Ser Ser
                    150
Phe Asn Thr Gly Phe Met Leu Arg Thr Gln Phe Cys Asn Leu Asp Val
                                    170
                                                        175
Ile Asn His Tyr Phe Cys Asp Leu Leu Pro Leu Leu Asn Leu Ala Ser
            180
                                185
Ser Asn Thr Tyr Ile Asn Glu Ile Leu Ile Leu Phe Phe Ala Thr Leu
                            200
Asn Ser Phe Val Pro Val Leu Thr Ile Ile Thr Ser Tyr Ile Phe Ile
                        215
Ile Val Thr Ile Leu Ser Ile His Ser Arg Glu Gly Lys Phe Lys Ala
                                        235
Phe Ser
```

<210> 2395 <211> 196 <212> PRT

<213> Mus musculus

<400> 2395

Met Ser Asn Ser Thr Leu Val Thr Glu Phe Met Leu Glu Asp Phe Ala Glu Asn Trp Glu Leu Arg Ile Leu Leu Ser Val Leu Phe Leu Leu Val 25 Tyr Leu Tyr Ser Leu Ile Gly Asn Leu Ile Ile Ile Ala Thr Thr Val Asp Gln Thr Leu Asn Thr Pro Met Tyr Phe Phe Leu Arg Asn Leu Ser Ile Leu Asp Ile Cys Tyr Val Ser Val Thr Val Pro Asn Ala Cys 70 Ile Asn Ser Leu Thr Asp His Arg Asn Ile Ser Val Gly Gly Cys Ala Ala Gln Ile Phe Phe Val Tyr Ile Cys Ala Cys Val Glu Ile Leu Phe 100 105 Leu Thr Ile Met Ala Gln Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 Leu Tyr Pro Val Ile Met Asn His Trp Phe Cys Val Gln Met Thr Leu 140 Ala Ser Leu Leu Ser Ser Leu Val Leu Ala Ser Val His Thr Phe Lys 150 155 Thr Phe Gln Leu Ser Phe Cys His Ser Asn Val Val Pro Gln Phe Phe 170 Cys Asp Ile Pro Ser Leu Leu Arg Leu Tyr Leu Leu Leu Ile Pro Leu 180 185 190 Ile Thr Asn Ser 195

```
<210> 2396
<211> 177
<212> PRT
<213> Mus musculus
<400> 2396
Met Ala Ser His Asn Phe Thr Met Val Thr Glu Phe Ile Leu Val Ala
Asn Thr Asp Cys Pro Glu Leu Gln Val Pro Leu Phe Gly Leu Phe Pro
            20
                                25
Ile Ile Tyr Leu Ile Ile Leu Val Gly Asn Leu Gly Met Ile Ile Leu
        35
                            40
Thr Met Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg
                        55
His Leu Ala Thr Thr Tyr Ser Thr Ala Val Gly Pro Lys Met Leu Arg
                    70
                                        75
Asn Phe Leu Val Glu Gln Asn Lys Lys Leu Phe Tyr Asp Cys Ala Phe
                85
Gln Ser Ser Phe Phe Ser Ser Leu Leu Val Asn Phe Phe Ile Leu Tyr
            100
                                105
Ala Ile Phe Tyr Asp Cys Tyr Val Ala Ile Cys Lys Pro Leu Asn Tyr
        115
                            120
                                                125
Asn Val Ile Met Ser Gln Arg Leu Cys Trp Ile Leu Val Ala Val Pro
                        135
                                            140
Tyr Leu Tyr Ser Ile Phe Val Ala Leu Ile Val Thr Ile Asn Ile Phe
                    150
                                        155
Pro Ser Ser Phe Cys Gly Pro Asn Ile Ile Asn His Phe Phe Tyr Asn
                                    170
Gly
<210> 2397
<211> 215
<212> PRT
<213> Mus musculus
<400> 2397
Met Phe Phe Val Ala Ser Met Met Gly Asn Ser Leu Ile Val Phe Thr
                 5
                                    10
Val Ala Ser Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Ala
            20
                                25
Asn Leu Ser Phe Ile Asp Leu Gly Val Ser Ser Val Ser Ser Pro Lys
                            40
                                                45
Met Leu Tyr Asp Leu Phe Arg Lys His Lys Val Ile Ser Phe Thr Gly
                        55
Cys Val Thr Gln Ile Phe Phe Ile His Val Ile Gly Gly Val Glu Met
65
                    70
Val Leu Leu Ile Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys
                                    90
Pro Leu His Tyr Leu Thr Ile Met Ser Pro Arg Thr Cys Ile Leu Phe
            100
                                105
Ser Val Thr Ala Trp Val Val Gly Leu Met His Ser Leu Ile Gln Leu
                            120
```

Ala Phe Val Val Asn Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Ser

Phe Tyr Cys Asp Leu Pro Arg Phe Ile Lys Leu Ala Cys Ile Asp Thr

140

155

```
Asn Gln Leu Glu Phe Met Val Thr Val Asn Ser Gly Phe Ile Ser Val
                165
Gly Ser Phe Phe Ile Leu Ile Ile Ser Tyr Ile Val Ile Ile Ile Ser
Val Gln Lys His Ser Ser Gly Gly Ser Ser Lys Ala Leu Ser Thr Leu
                            200
Ser Ala His Ile Thr Val Val
    210
<210> 2398
<211> 158
<212> PRT
<213> Mus musculus
<400> 2398
Met Pro Ser Arg Ser Val Leu Gly Asp Gly Asn His Thr Ser Val Ala
Met Phe Val Leu Gly Leu Leu Asp Gln Ala Glu Leu Gln Leu Ile
Leu Phe Pro Val Phe Leu Gly Thr Tyr Leu Ile Thr Leu Ile Trp Asn
Leu Gly Leu Ile Ile Leu Ile Arg Met Asp Ser His Leu Gln Thr Pro
Met Tyr Phe Phe Leu Ser Phe Leu Ser Phe Ile Asp Ile Cys Tyr Ser
                    70
Ser Ser Ile Ser Pro Arg Met Leu Ser Asp Phe Leu Lys Ala Glu Lys
                                    90
Thr Ile Ser Phe Ile Ala Cys Ala Thr Gln Tyr Phe Val Met Ala Trp
                                105
Met Gly Ala Ser Glu Cys Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg
                            120
                                                 125
Tyr Val Ala Ile Gly Ser Pro Leu Gln Tyr Ser Val Ile Met Ala Pro
                        135
                                            140
Ser Leu Cys Trp Arg Met Val Ala Gly Val Tyr Arg Ser Gly
                    150
<210> 2399
<211> 139
<212> PRT
<213> Mus musculus
<400> 2399
Met Pro Ser Ile Ser Val Leu Gly Asp Gly Asn His Thr Ser Val Ala
Met Phe Val Leu Leu Gly Leu Leu Asp Gln Ala Glu Leu Gln Leu Ile
                                25
Leu Phe Pro Val Phe Leu Gly Thr Tyr Leu Ile Thr Leu Ile Trp Asn
Leu Gly Leu Ile Ile Leu Ile Arg Met Asp Ser His Leu Gln Thr Pro
                        55
Met Tyr Phe Phe Leu Ser Phe Leu Ser Phe Ile Asp Ile Cys Tyr Ser
                    70
Ser Ser Ile Ser Pro Arg Met Leu Ser Asp Phe Leu Lys Thr Glu Lys
```

90

Thr Ile Ser Phe Ile Ala Cys Ala Thr Gln Asn Phe Val Leu Asp Trp 100 105 110 Met Gly Thr Ser Glu Cys Cys Leu Leu Thr Ala Met Ala Tyr Asp Arg

```
120
                                                 125
       115
Tyr Val Ala Ile Gly Ser Pro Leu Gln Tyr Ser
<210> 2400
<211> 157
<212> PRT
<213> Mus musculus
<400> 2400
Arg Thr Lys Asn His Thr Val Val Thr Glu Phe Ile Leu Met Gly Ile
                                    10
1
Thr Asp His Pro Asp Leu Gln Pro Ser Leu Phe Gly Leu Phe Leu Leu
                                25
            20
Ile Tyr Leu Ile Ser Leu Val Gly Asn Leu Gly Met Ile Ile Leu Thr
                            40
Met Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg Gln
                        55
Leu Ala Thr Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys Met
                    70
                                        75
Leu Thr Asn Phe Ile Val Asp Gln Asn Arg Ile Phe Phe Asn Leu Cys
                8.5
                                    90
Thr Thr Gln Leu Ala Phe Phe Leu Leu Phe Ile Ala Cys Glu Leu Phe
           100
                                105
                                                    110
Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
        115
Leu Phe Tyr Met Val Ile Met Ser Lys Arg Leu Cys Trp Val Leu Val
                        135
                                            140
Val Met Pro Leu Cys Leu Leu Tyr Asn Cys Gly Cys Phe
                    150
<210> 2401
<211> 194
<212> PRT
<213> Mus musculus
<400> 2401
Phe Leu Ala Val Met Ala Phe Asp Arg Tyr Leu Ala Ile Cys Arg Pro
                                    10
                 5
Leu His Tyr Pro Ser Leu Met Thr Gly Arg Leu Arg Asn Thr Leu Val
            20
                                25
Thr Ser Cys Trp Val Leu Gly Phe Leu Trp Phe Pro Val Pro Ile Ile
                            40
                                                45
Ile Ile Ser Gln Met Ser Phe Cys Gly Ser Arg Ile Ile Asp His Phe
                        5.5
Leu Cys Asp Pro Gly Pro Leu Leu Ala Leu Ala Cys Ser Arg Val Pro
                    70
                                        75
Leu Ile Glu Val Phe Trp Ser Ile Ile Met Ser Met Leu Leu Val Ile
                                    90
                85
Pro Phe Leu Phe Ile Met Gly Thr Tyr Ile Leu Val Leu Arg Ala Val
                                105
            100
                                                    110
Phe Arg Leu Pro Ser Arg Glu Gly Gln Lys Lys Ala Phe Ser Thr Cys
        115
                            120
                                                125
```

Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Cys Ser Val Met Ile

Met Tyr Leu Ser Pro Thr Ser Glu His Glu Ala Gly Met Gln Lys Leu

140

155

135

Val Thr Leu Phe Tyr Ser Val Gly Thr Pro Leu Leu Asn Pro Met Ile 170 Tyr Ser Leu Arg Asn Lys Asp Met Lys Asn Ala Leu Gln Lys Ile Leu 180 185 190 Arg Thr

<210> 2402 <211> 179 <212> PRT <213> Mus musculus

<400> 2402

Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Leu Tyr Pro Val Met Met Ser Asn Ser Leu Cys Met Lys Phe Ile His Val Ser Tyr Ile Val Gly Phe Leu His Ser Ala Ile His Val 40 Gly Leu Leu Val Arg Leu Asn Phe Cys Lys Ser Asn Ile Ile His Tyr 5.5 Phe Tyr Cys Glu Ile Leu Gln Leu Phe Lys Ile Ser Cys Ile Asn Pro Thr Met Asn Val Leu Leu Val Leu Ile Phe Ser Thr Leu Ile Gln Gly 90 Leu Thr Phe Met Thr Phe Ile Val Ser Tyr Ser Ser Val Ile Phe Pro 105 110 Ile Leu Lys Thr Lys Ser Glu Arg Gly Arg Arg Lys Ala Phe Ser Thr 120 Cys Ser Ala His Leu Leu Ser Val Ser Leu Phe Tyr Gly Thr Leu Phe 135 Leu Met Tyr Val His Pro Gly Ser Gly Ser Gly Glu Asp Lys Gly Arg 150 155 Met Tyr Ser Leu Phe Tyr Thr Ile Ile Ile Leu Phe Leu Asn Pro Phe 170 Phe Ile Thr

<210> 2403 <211> 262 <212> PRT <213> Mus musculus

<400> 2403

Thr His Ser Cys Thr Leu Pro Met Tyr Phe Phe Leu Ser Thr Leu Ser Leu Leu Asp Met Ser Tyr Val Thr Thr Met Pro Gln Met Leu Val His 25 Leu Leu Ala His Ser Gln Thr Ile Ser Phe Ala Gly Cys Cys Leu Gln Met Tyr Val Phe Gly Ala Leu Gly Met Thr Glu Cys Thr Phe Phe Val 55 Val Met Ala Tyr His Arg Tyr Val Ala Ile Cys Pro Leu Pro Tyr Thr 70 75 Val Ile Leu Asn Trp Gly Leu Cys Met Arg Leu Ala Ala Gly Ser Trp 90 Ile Cys Gly Phe Phe Ser Ser Leu Leu His Thr Phe Phe Thr Met Ser

```
100
Leu Pro Tyr Cys Gly Pro Asn Arg Val Asn His Tyr Leu Cys Glu Gly
                           120
                                               125
       115
Pro Ser Val Arg Ser Leu Val Cys Met Asp Thr His Phe Val Glu Met
                       135
                                           140
Val Asp Leu Val Leu Ser Val Phe Leu Val Val Ile Pro Ile Ser Leu
                   150
                                       155
Ile Val Ala Ser Tyr Ile His Ile Ala Met Ala Ile Leu Lys Ile Lys
               165
                                   170
Ser Thr Glu Gly Arg Cys Lys Ser Phe Ser Thr Cys Ala Ser Leu Leu
           180
                               185
Thr Val Val Thr Leu Phe Tyr Ile Ser Ala Thr Tyr Asn Tyr Met Arg
                           200
       195
Pro Asn Ser Ser Tyr Ser Pro Glu Asp Lys Gln Ile Ser Leu Phe Tyr
                       215
Asn Ala Phe Thr Pro Leu Leu Asn Pro Val Ala Tyr Ser Leu Arg Asn
                   230
                                       235
Lys Asn Ile Lys Arg Ala Phe Leu Lys Val Ile Ser Tyr Ser Arg Trp
               245
                                   250
Ala Gly Gly Pro Gly Trp
           260
```

<210> 2404 <211> 225 <212> PRT

<213> Mus musculus

<400> 2404

Met Glu Gln Ser Asn Asp Thr Lys Val Thr Glu Phe Ile Leu Leu Gly 10 Phe Ala Gly Gln His Lys Ser Trp His Ile Leu Phe Ile Ile Phe Leu 2.5 Met Ile Tyr Val Val Thr Leu Met Gly Asn Ile Gly Met Ile Val Leu 40 Ile Lys Ile Asp Ser Ser Leu His Thr Pro Met Tyr Phe Phe Leu Gln 55 His Leu Ala Phe Val Asp Leu Cys Tyr Thr Ser Ala Ile Thr Pro Lys 70 75 Met Leu Lys Asn Phe Thr Glu Thr Lys Ala Ser Ile Ser Phe Ile Gly 90 Cys Met Leu Gln Leu Leu Ala Tyr Gly Thr Phe Ala Thr Ile Asp Cys 105 Phe Ile Leu Ala Ala Met Ala Val Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Arg Tyr Pro Ile Val Met Ser Gln Arg Leu Cys Ile Leu Leu Leu Val Gly Ser Tyr Thr Met Gly Phe Leu Asn Ala Ser Val Asn Thr 150 155 Ser Phe Thr Phe Ser Leu Lys Phe Cys Lys Ser Asn Ala Ile Asn His 170 Phe Phe Cys Asp Glu Pro Pro Ile Leu Ala Leu Ser Cys Ser Ser Ile 180 185 Asp Phe Ser Ile Met Leu Leu Thr Val Phe Val Gly Phe Asn Leu Val 195 200 205 Glu Thr Val Leu Val Val Ile Phe Ser Tyr Ile Tyr Ile Leu Ser Ala 215 220 Ile

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<211> 155
<212> PRT
<213> Mus musculus
<400> 2405
Leu Met Leu Phe Leu Lys Leu Asp Phe Cys Ala Ser Asn Val Ile Asp
1
His Phe Cys Cys Asp Tyr Phe Pro Ile Leu Gln Leu Ser Cys Ser Asp
                                                     30
Thr Trp Phe Leu Glu Thr Ile Gly Phe Tyr Phe Ala Phe Ile Thr Leu
                            40
Leu Phe Thr Leu Ala Leu Val Ile Leu Ser Tyr Ile Cys Ile Ile Asn
Thr Ile Leu Arg Phe Pro Ser Ala Ser Gln Arg Lys Lys Ala Phe Ser
                                        75
Thr Cys Ser Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys
                                    90
Ile Phe Met Tyr Val Lys Pro Ser Ala Asn Glu Arg Ala Ser Leu Thr
            100
                                105
Lys Gly Val Ala Leu Leu Asn Thr Ser Ile Ala Pro Met Leu Asn Pro
                            120
Phe Ile Tyr Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp
                        135
Leu Ile Asn Lys Leu Met Phe Asn Arg Asn Lys
                    150
<210> 2406
<211> 214
<212> PRT
<213> Mus musculus
<400> 2406
Asp Leu Ala Ile Gly Gln Tyr Cys Met Leu His Glu Phe Ile Leu Thr
Glu Leu Ser Lys Lys Leu Asp Ser Gln Leu Pro Phe Ser Ser Thr Phe
                                25
Ile Gly Thr Tyr Ala Leu Thr Leu Val Gly Asn Leu Gly Arg Phe Thr
                            40
Leu Asn Gln Ser Phe His Leu His Lys Pro Met Tyr Tyr Phe Phe Ser
Asn Ile Tyr Ser Ile Asn Leu Cys His Pro Met Val Val Asn Pro Lys
                                        75
Met Phe Gly Lys Phe Val Ile Glu Asn Asn Pro Ile Ser His Pro Gln
                                    90
Tyr Met Thr Gln Leu Tyr Phe Ile Leu Ser Phe Val Thr Ala Lys Cys
            100
                                105
His Leu Leu Ala Ala Ile Ser Tyr Glu Pro His Val Ala Ile Tyr Asn
       115
                            120
Pro Leu Val Tyr Asn Val Thr Ile Phe Ser Gln Ile Tyr Ser Ser Leu
                        135
                                            140
Ile Ser Glu Val His Ile Thr Gly Val Val Cys Ile Ser Gly His Thr
                    150
                                        155
                                                             160
Gly Ile Lys Ile Ser Val Leu Gly Asn Ile Gly Val Ile Lys Tyr His
                                                         175
                                    170
Phe Tyr Val Leu Thr Gln Asn Ser Pro Thr Tyr Val Lys Val Leu Val
```

<210> 2405

```
180
                                185
Phe Leu Leu Phe Tyr Leu Ile Ile Phe His Pro Ile His Ser Leu Ile
      195
                            200
Lys Leu Lys Phe Phe Phe
   210
<210> 2407
<211> 124
<212> PRT
<213> Mus musculus
<400> 2407
Met Ala Glu Gly Asn Ser Ser Thr Val Phe Gln Phe Ile Leu Glu Gly
                                    10
Leu Thr Asp Asp Pro Glu Leu Glu Val Thr Leu Phe Ala Val Phe Leu
           2.0
                                25
Val Ile Tyr Leu Thr Thr Val Leu Gly Asn Leu Gly Leu Ile Met Leu
       35
                            40
Ile Gln Val Ser Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Cys
                        55
His Leu Ala Phe Val Asp Phe Cys Tyr Thr Ser Ser Val Thr Pro Asn
                    70
Thr Ile Ile Asn Phe Leu Arg Glu Ile Lys Ser Ile Thr Leu Tyr Ala
                                    90
                85
Cys Ala Thr Gln Val Cys Cys Phe Ile Thr Phe Ala Val Cys Glu Met
           100
                                105
Tyr Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val
<210> 2408
<211> 317
<212> PRT
<213> Mus musculus
<400> 2408
Met Lys Asn Tyr Asn Ser Ser Leu Gly Phe Leu Pro Thr Thr Phe Ile
                                    10
                 5
Leu Val Gly Ile Pro Gly Leu Glu Thr Glu His Ile Trp Ile Ser Ile
                                25
Pro Phe Cys Leu Met Tyr Phe Ile Ile Phe Leu Gly Asn Gly Thr Ile
                            40
                                                 45
Leu His Val Ile Arg Thr Asp Ala Ser Leu His Gln Pro Met Tyr Leu
                        55
Phe Leu Ala Met Leu Ala Leu Ala Glu Val Gly Val Ser Ala Ser Thr
                                        75
Leu Pro Thr Val Leu Gly Ile Phe Leu Phe Asp Thr Ser Glu Ile Thr
                                    90
Phe Glu Ala Cys Leu Leu Gln Met Phe Phe Ile His Ser Phe Ser Ile
            100
                                105
                                                    110
Met Glu Ser Ala Val Leu Leu Ala Met Ser Val Asp Arg Phe Val Ala
                            120
                                                125
Ile Tyr Ser Pro Leu Arg Tyr Thr Thr Ile Leu Thr Leu Pro Arg Ile
                        135
                                            140
Phe Gly Thr Gly Ala Val Ile Gly Leu Lys Ser Val Ile Leu Met Ala
                    150
                                        155
Pro Leu Pro Ile Leu Leu Arg Arg Leu Pro Phe Cys Gly His Asn Ala
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Leu Ser His Ser Tyr Cys Leu His Pro Asn Leu Ile His Leu Pro Cys
                                185
Gly Asp Ile Ser Ile Asp Asn Ile Tyr Gly Leu Phe Ile Val Thr Ser
        195
                            200
Thr Phe Gly Leu Asp Ser Leu Leu Ile Val Val Ser Tyr Gly Leu Ile
                        215
Leu His Thr Val Leu Gly Ile Ala Thr Gly Asp Gly Arg Arg Lys Ala
                    230
                                        235
Leu Asn Thr Cys Gly Ser His Val Cys Ala Val Leu Ala Tyr Tyr Val
                                    250
Pro Met Ile Gly Leu Ser Met Val His Arg Phe Ala His His Val Ser
            260
                                265
Pro Leu Leu Gln Thr Met Met Ala Asn Ala Tyr Leu Phe Phe Pro Pro
Val Ile Asn Pro Ile Val Tyr Ser Ile Lys Thr Lys Glu Ile Arg Arg
                        295
Gly Ile Val Arg Met Leu Ser Glu Lys Arg Phe Arg Val
                    310
```

<210> 2409 <211> 322 <212> PRT

<213> Mus musculus

<400> 2409

Met Pro Gln Pro Leu Val Pro Leu Ile Ala Thr Pro Asn Gly Ser Leu Ala His Pro Ala Tyr Phe Leu Leu Val Gly Ile Pro Gly Leu Gly Ser Lys Ile His Phe Trp Leu Ala Phe Pro Leu Cys Phe Met Tyr Ala Val 40 Ala Thr Leu Gly Asn Leu Ala Ile Ile Phe Ile Ile Arg Val Glu Arg Arg Leu His Glu Pro Met Tyr Leu Phe Leu Ala Met Leu Ser Thr Ile Asp Leu Val Leu Ser Ser Val Thr Met Pro Lys Met Ala Ser Leu Phe Leu Thr Gly Ile Gln Glu Ile Glu Phe Asn Ile Cys Leu Thr Gln Met 105 Phe Leu Ile His Ala Leu Ser Ala Met Glu Ser Ala Val Leu Leu Ala 120 125 Met Ala Phe Asp Arg Phe Val Ala Ile Cys Tyr Pro Leu Arg His Ala 135 Ser Val Leu Thr Gly Thr Thr Val Ala Lys Ile Gly Leu Ala Ser Leu 150 155 Ala Arg Gly Phe Val Phe Phe Pro Leu Pro Phe Leu Leu Lys Arg 170 Leu Ser Tyr Cys Gln Thr His Thr Val Thr His Ser Phe Cys Leu His 180 185 190 Gln Asp Ile Met Lys Leu Ser Cys Thr Asp Thr Lys Val Asn Val Val 200 Tyr Gly Leu Phe Ile Ile Leu Ser Val Met Gly Val Asp Ser Leu Phe 210 215 Ile Gly Phe Ser Tyr Ile Leu Ile Leu Arg Ala Val Leu Glu Leu Ser 230 235 Thr Arg Gly Ala Ala Leu Lys Ala Phe Asn Thr Cys Ile Ser His Leu 250 Cys Ala Val Leu Val Phe Tyr Val Pro Leu Ile Gly Leu Ser Val Val

265 His Arg Leu Gly Gly Pro Thr Ser Leu Val His Val Ile Met Ala Asn 280 Ile Tyr Leu Leu Pro Pro Val Val Asn Pro Ile Val Tyr Gly Ala 295 Lys Thr Lys Glu Ile Arg Ser Arg Val Ile Arg Met Phe Ser Gln Asp 305 310 Gly Arg <210> 2410 <211> 346 <212> PRT <213> Mus musculus <400> 2410 Met Phe Phe Arg Val Cys Leu Gln Val Thr Met Leu Ile Phe Asn Asn 5 10 Thr Thr Ser Pro Ser Ser Ser Phe Leu Leu Thr Ala Phe Pro Gly 20 25 Leu Glu Leu Ala His Val Trp Ile Ser Ile Pro Val Cys Gly Leu Tyr 40 Thr Ile Ala Leu Leu Gly Asn Ser Ile Ile Leu Phe Val Ile Ile Ile 55 Glu Arg Ser Leu His Lys Pro Met Tyr Tyr Phe Leu Ser Met Leu Ser 70 75 Val Val Asp Leu Gly Leu Thr Ile Thr Thr Leu Pro Thr Val Leu Gly 90 85 Val Leu Trp Phe His Ala Arg Glu Ile Ser Ile Lys Val Cys Leu Ile 105 110 100 Gln Met Phe Phe Val His Gly Phe Ser Phe Leu Glu Ser Ser Val Leu 120 125 115 Val Ala Met Ala Phe Asp Arg Tyr Leu Ala Ile Cys Ser Pro Leu Lys 135 140 Tyr Ala Thr Phe Leu Thr Asp Met Met Ser Phe Val Ile Gly Leu Ile 150 155 Ile Cys Ile Arg Gln Val Val Phe Met Phe Pro Ser Val Met Ala Val 170 165 Lys Ser Val Ser Phe Gln Gly Gly Gln Glu Leu Ser His Pro Phe Cys 180 185 190 Phe His Pro Asp Ile Ile Lys Phe Thr Tyr Thr Asn Pro Trp Ile Ser 200 Ser Phe Trp Gly Met Phe Leu Gln Leu Tyr Leu Asn Gly Thr Asp Leu 215 220 Leu Phe Ile Leu Phe Ser Tyr Val Leu Ile Leu Arg Thr Val Leu Asn 230 235 Ile Val Ala Pro Gln Lys Gln Gln Lys Ala Leu Ser Thr Cys Val Cys 250 245 His Ile Cys Ala Val Thr Ile Phe Tyr Val Pro Met Ile Thr Leu Ser 265 Val Ala His Arg Leu Phe Ser Ser Thr Pro Arg Val Ile Cys Ser Ile 280 Leu Gly Asn Met Tyr Leu Leu Leu Pro Pro Val Leu Asn Pro Ile Ile 295 300 Tyr Ser Leu Lys Thr Lys Val Ile Arg Gln Ala Ile Phe Gln Leu Phe 310 315 Arg Phe Lys Asp Ala Arg Gly Tyr Ile Met Arg Ser Leu Arg Gly Arg

330

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<210> 2411
<211> 330
<212> PRT
<213> Mus musculus
<400> 2411
Met Ser Thr Phe Gln Asn Thr Thr Ala Ser Ser Ile Ile Phe Leu Leu
Thr Gly Val Pro Gly Leu Glu Ala Phe His Thr Trp Ile Ser Ile Pro
                                25
Phe Cys Phe Leu Tyr Ala Thr Ala Leu Ser Gly Asn Ser Leu Ile Leu
Phe Val Ile Ile Thr Gln Pro Ser Leu His Glu Pro Met Cys Tyr Phe
                        55
Leu Ser Met Leu Ser Thr Thr Asp Leu Gly Leu Ser Ile Ser Thr Leu
                                        75
Ala Thr Met Leu Gly Ile Phe Trp Phe Asn Ala Arg Glu Ile Ser Phe
               85
                                    90
Asn Ala Cys Leu Ser Gln Met Phe Phe Ile Gln Leu Phe Thr Val Met
           100
                                105
Glu Ser Ser Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile
                            120
Ser Asn Pro Leu Arg Tyr Ala Ser Val Leu Thr Asp Leu Lys Ile Ala
                        135
                                            140
Gln Ile Gly Val Ala Ile Val Thr Arg Gly Thr Leu Ile Leu Thr Pro
                    150
                                        155
Met Val Val Leu Leu Lys Arg Leu Ser Tyr Cys Ser Ser His Val Leu
                                    170
               165
His His Ser Tyr Cys Phe His Pro Asp Val Met Lys Leu Ser Cys Thr
            180
                                185
                                                    190
Asp Thr Arg Ile Asn Ser Ala Val Gly Leu Thr Ala Leu Ile Ser Thr
       195
                            200
Ala Gly Val Asp Ser Val Phe Ile Ile Leu Ser Tyr Val Leu Ile Ile
                        215
Arg Thr Val Leu Ser Ile Ala Ser Pro Glu Glu Arg Lys Lys Ala Phe
                    230
                                        235
Ser Thr Cys Ile Ser His Ile Gly Ala Val Ala Val Phe Tyr Ile Pro
                245
                                    250
Leu Ile Ser Leu Ser Phe Val His Arg Phe Gly Lys Arg Ala Pro Pro
                                265
Tyr Val His Thr Leu Ile Ala Asn Ala Tyr Leu Leu Ile Pro Pro Val
                            280
Met Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Lys Ile Arg Lys Ala
                        295
                                            300
Val Leu Lys Val Phe His Ser Ser Met Thr Arg Ala Ser Leu Leu Phe
                                        315
                    310
His Arg Phe Ser Thr Leu Ser Phe Tyr Glu
                325
<210> 2412
<211> 309
<212> PRT
<213> Mus musculus
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<400> 2412
Val Leu Leu Asn His Thr Leu Val Thr Glu Phe Leu Leu Gly Val
                                    10
Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Thr Val Leu Ala
Met Tyr Phe Val Asn Val Ala Gly Asn Gly Ala Ile Leu Met Ile Val
                            40
Ile Ser Asp Pro Arg Leu His Leu Pro Met Tyr Phe Phe Leu Gly Asn
Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val Thr Val Pro Lys Met
                    70
Leu Glu Asn Phe Phe Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys
                85
                                    90
Ile Thr Gln Leu His Phe Phe His Phe Leu Gly Ser Thr Glu Ala Leu
                                105
Leu Leu Thr Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro
                            120
Leu His Tyr Pro Ala Ile Met Asn Ser Gln Ile Cys Ile Leu Val Ala
                        135
                                            140
Ile Ser Ile Trp Ala Ile Pro Phe Leu His Ala Leu Val His Ser Ile
                    150
                                        155
Leu Thr Ser Gln Leu Asn Phe Cys Gly Ser Asn His Ile His His Phe
                                    170
Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu
                                185
                                                     190
Leu Asn Arg Trp Leu Leu Asn Thr Leu Thr Gly Thr Val Ala Ile Gly
        195
                            200
Leu Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Val Thr Tyr Leu
                        215
Phe Leu Lys Thr Arg Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr
                    230
                                         235
Cys Ala Ser His Phe Met Val Val Met Ile Phe Tyr Ala Pro Val Leu
                                    250
Phe Ile Tyr Ile Asn Pro Asp Ser Gly Ser Ser Leu Glu Lys Asp Arg
                                265
                                                     270
Ile Ile Ala Val Met Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
                            280
Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Gly Ala Leu Asn Arg Lys
    290
                        295
                                             300
Ile Arg Ile Leu Leu
305
<210> 2413
<211> 312
<212> PRT
<213> Mus musculus
<400> 2413
Met Ser Ser Ile Asn Ser Thr Gln Phe His Pro Ser Phe Phe Ile Leu
                                    10
Val Gly Ile Pro Gly Leu Glu Ile Phe His Ile Trp Ile Ala Phe Pro
            20
                                25
Phe Cys Leu Val Tyr Leu Thr Ser Leu Val Gly Asn Ile Thr Ile Leu
        35
Phe Val Ile Lys Thr Glu His Ser Leu His Gln Pro Met Phe Tyr Phe
                        55
Leu Ala Thr Leu Ser Ile Ile Asp Leu Cys Leu Ser Thr Ser Thr Ile
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Pro Lys Met Leu Gly Ile Phe Trp Phe Asn Leu Arg Glu Ile Ser Phe
Gly Gly Cys Leu Ala Gln Met Phe Phe Ile His Val Phe Thr Gly Met
                                105
Glu Thr Val Leu Leu Val Val Met Ala Tyr Asp Arg Phe Val Ala Ile
       115
                            120
Cys Lys Pro Leu Gln Tyr Thr Thr Ile Leu Thr Asn Lys Thr Ile Ser
                        135
Leu Leu Ser Val Val Ile Gly Arg Asn Leu Ile Leu Val Thr Pro
                   150
Phe Val Phe Leu Ile Leu Arg Leu Pro Phe Cys Gly His His Ile Met
               165
                                    170
Pro His Thr Tyr Cys Glu His Met Gly Leu Ala Arg Leu Ala Cys Ala
           180
                                185
Pro Ile Lys Ile Asn Ile Ile Tyr Gly Leu Val Val Ile Ser His Ile
       195
                            200
Leu Val Asp Met Ile Leu Ile Ala Ser Ser Tyr Val Leu Ile Leu Arg
                        215
Ala Val Phe Arg Ile Pro Ser Gln Asp Ala Arg Leu Lys Ala Leu Asn
                   230
                                        235
Thr Cys Gly Ser His Val Cys Ile Met Leu Cys Phe Tyr Thr Pro Ala
                245
                                    250
Leu Phe Ser Phe Met Thr His Arg Phe Gly Gln Asn Ile Pro His Tyr
Ile His Ile Leu Leu Ala Asn Leu Tyr Val Val Ile Pro Pro Ala Leu
                            280
Asn Pro Val Ile Tyr Gly Val Arg Thr Lys Gln Ile Arg Glu Lys Ile
                        295
Ile Lys Ile Val Val Gln Lys Glu
```

<210> 2414

<211> 312

<212> PRT

<213> Mus musculus

<400> 2414

Met Glu Lys Trp Asn Gln Ser Ser Ser Asp Phe Ile Leu Leu Gly Leu Leu Pro Gln Asn Gln Thr Gly Leu Leu Met Met Leu Ile Ile Leu Val Phe Phe Leu Ala Leu Phe Gly Asn Ser Ala Met Ile His Leu Ile 4.0 Arg Val Asp Pro Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser Gln Leu Ser Leu Met Asp Leu Met Tyr Ile Ser Thr Thr Val Pro Lys Met Ala Phe Asn Phe Leu Ser Gly Gln Lys Asn Ile Ser Phe Leu Gly Cys 90 Gly Val Gln Ser Phe Phe Phe Leu Thr Met Ala Gly Ser Glu Gly Leu 105 Leu Leu Ala Ser Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro 120 Leu His Tyr Pro Ile Arg Met Ser Lys Ile Met Cys Leu Lys Met Ile 135 140 Ile Gly Ser Trp Ile Leu Gly Ser Ile Asn Ser Leu Ala His Ser Ile 155 Tyr Ala Leu His Ile Pro Tyr Cys His Ser Arg Ser Ile Asn His Phe

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165
                                    170
Phe Cys Asp Val Pro Ala Met Leu Pro Leu Ala Cys Met Asp Thr Trp
           180
                                185
                                                    190
Val Tyr Glu Tyr Met Val Phe Val Ser Thr Ser Leu Phe Leu Leu
       195
                            200
Pro Phe Leu Gly Ile Thr Ala Ser Tyr Gly Arg Val Leu Phe Ala Val
                        215
                                            220
Phe His Met Arg Ser Lys Glu Gly Lys Lys Lys Ala Phe Thr Thr Cys
                    230
                                        235
Ser Thr His Leu Thr Val Val Thr Phe Tyr Tyr Ala Pro Phe Val Tyr
                245
                                    250
Thr Tyr Leu Arg Pro Arg Ser Leu Arg Ser Pro Thr Glu Asp Lys Ile
            260
                                265
Leu Thr Val Phe Tyr Thr Ile Leu Thr Pro Met Leu Asn Pro Ile Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Leu Gly Ala Met Thr Arg Val Leu
                        295
Gly Thr Phe Ser Ser Met Lys Pro
<210> 2415
<211> 321
<212> PRT
<213> Mus musculus
<400> 2415
Met Glu Asn Ile Ala Cys Asn Gly Ser Gly Asn Ser Gln Thr Ser Phe
                                    10
                 5
Tyr Leu Thr Gly Ile Pro Ser Leu Gln Lys Ser Leu Phe Leu Pro Val
            20
                                25
Phe Leu Ile Phe Leu Leu Tyr Leu Leu Ile Leu Val Gly Asn Ala
                            40
                                                4.5
Leu Ile Leu Val Ala Val Ala Glu Arg Ser Leu His Lys Pro Met
                        55
Tyr Phe Phe Leu Ile Asn Leu Ser Ala Leu Asp Ile Leu Phe Thr Thr
65
                    70
                                        75
Thr Thr Val Pro Lys Met Leu Ser Leu Leu Leu Gly Asp Arg Phe
                85
                                    90
Leu Ser Phe Pro Ala Cys Phe Leu Gln Met Tyr Leu Phe His Ser Phe
           100
                                105
                                                    110
Ser Cys Ser Glu Ala Phe Ile Leu Val Val Met Ala Tyr Asp Arg Tyr
                            120
                                                125
Val Ala Ile Cys Arg Pro Leu His Tyr Pro Val His Met Thr Pro Gln
                        135
                                            140
Thr Asn Thr Ala Leu Ala Ala Ser Ala Trp Ile Thr Ala Leu Leu Leu
                    150
                                        155
Pro Ile Pro Ala Val Ile Gln Thr Ser Gln Met Ala Phe Asp Asn Ile
                                    170
Ala Tyr Ile Tyr His Cys Phe Cys Asp His Leu Ala Val Val Gln Ala
            180
                                185
                                                    190
Ser Cys Ser Asp Thr Thr Pro Gln Thr Leu Met Gly Phe Cys Ile Ala
        195
                            200
Met Val Val Ser Phe Leu Pro Leu Leu Leu Val Leu Leu Ser Tyr Ala
                        215
                                            220
Arg Ile Leu Ser Ser Val Leu Arg Ile Asn Ser Lys Glu Gly Arg Ser
                                        235
Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Val Val Gly Thr Tyr
                                    250
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<210> 2416 <211> 329 <212> PRT <213> Mus musculus

<400> 2416 Met Arg Pro Lys Leu His Pro Tyr Arg Met Ala Glu Ser Ser Gln Ser 10 Asn Ser Thr Phe Gln His Pro Ala Phe Phe Ile Leu Thr Gly Ile Pro 20 25 Ala Leu Gly Asp Gly Gln Ala Trp Leu Ser Leu Val Phe Gly Leu Met 40 Tyr Leu Leu Ala Leu Leu Gly Asn Ala Thr Leu Leu Thr Val Ile Arg 55 Ile Asp Ser Thr Leu His Gln Pro Met Phe Leu Leu Ala Thr Leu 75 Ala Ala Thr Asp Leu Gly Leu Ala Thr Ser Ile Ala Pro Glu Leu Leu 85 90 Ala Val Leu Trp Leu Gly Pro Gln Pro Val Gln Tyr Thr Ala Cys Leu 100 105 110 Ile Gln Met Phe Phe Val His Ala Leu Thr Ala Met Glu Ser Gly Val 120 115 125 Leu Leu Ala Met Ala Cys Asp Arg Ala Val Ala Val Gly Arg Pro Leu 135 140 His Tyr Pro Ile Leu Val Thr Lys Ala Arg Val Gly Tyr Ala Val Leu 150 155 Ala Leu Thr Leu Lys Val Leu Ala Val Ile Val Pro Phe Pro Leu Leu 165 170 175 Val Val Arg Phe Lys His Phe His Ala Lys Ile Ile His His Ala Tyr 180 185 190 Cys Ala His Met Ala Val Val Glu Leu Val Val Gly Asn Thr Trp Val 200 195 Asn Asn Met Tyr Gly Leu Ala Leu Ser Leu Ala Val Ser Gly Val Asp 215 220 Ile Leu Gly Ile Ala Gly Ser Tyr Gly Leu Ile Ala His Ala Val Leu 230 235 Arg Leu Pro Thr Gln Glu Ala Arg Val Lys Ala Phe Gly Thr Cys Ser 250 255 Ser His Ile Cys Val Ile Leu Ala Phe Tyr Val Pro Gly Leu Phe Ser 265 270 Phe Leu Thr His Arg Phe Gly Arg His Thr Val Pro Lys Pro Val His 280 285 Ile Leu Leu Ser Ile Ile Tyr Leu Leu Leu Pro Pro Ala Leu Asn Pro 295 300 Leu Ile Tyr Gly Val Arg Thr Lys Gln Ile Arg Asp Arg Phe Leu Glu 315 Met Phe Lys Phe Arg Lys Lys Gln Phe

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<210> 2417
<211> 322
<212> PRT
<213> Mus musculus
<400> 2417
Met Gly Glu Asp Gly Asn Thr Ser Ile Phe Asn Leu Ser Tyr Ser Ser
Phe Leu Leu Val Gly Phe Pro Gly Leu Gln Glu Gly Arg Pro Leu Leu
            20
Val Leu Pro Leu Thr Phe Leu Tyr Val Ser Ile Val Ser Ala Asn Ala
                            40
Leu Val Ile His Thr Val Val Ala Gln Arg Ser Leu His Gln Pro Met
                        55
Tyr Val Leu Ile Ala Leu Leu Leu Ala Val Asn Ile Cys Ala Ser Thr
65
                    70
                                        75
Ala Val Met Pro Lys Met Leu Glu Gly Phe Val His Tyr Ala Asn Pro
                                    90
                85
Ile Ser Leu Arg Gly Cys Leu Thr Gln Met Phe Phe Ile Tyr Phe Thr
            100
                                105
Leu Leu Leu Asp Tyr Asn Leu Leu Leu Ala Met Ala Leu Asp Arg Tyr
        115
                            120
                                                 125
Val Ala Ile Cys His Pro Leu Arg Tyr Thr Asp Leu Met Thr Ser His
                        135
                                            140
Leu Leu Gly Leu Met Ala Thr Phe Ala Ile Thr Arg Ser Leu Gly Val
                    150
                                        155
Ala Val Pro Leu Val Val Leu Thr Ala Lys Ala Gln Phe Cys Lys Thr
                                    170
                165
Ser Val Ile Arg His Phe Thr Cys Glu Tyr Ile Ala Leu Leu Ser Ile
            180
                                185
                                                     190
Ala Cys Gly Asp Leu Thr Phe Asn Asn Arg Leu Gly Leu Ala Met Arg
        195
                            200
Leu Val Thr Val Thr Phe Asp Leu Ala Leu Leu Gly Thr Ser Tyr Thr
                        215
                                            220
Arg Ile Ile Tyr Ala Ala Phe Arg Ile Ser Ser Gly Gly Ala Arg Ala
                    230
                                         235
Lys Ala Leu His Thr Cys Gly Ser His Leu Leu Val Ile Leu Thr Ile
                245
                                    250
Tyr Leu Ser Gly Leu Ser Thr Ser Ile Val Phe Arg Val Ala Lys Thr
            260
                                265
                                                     270
Val Ser Gln Asp Val Gln Asn Leu Leu Ser Ala Ile Tyr Leu Leu Leu
                            280
                                                 285
Pro Gly Ala Leu Asn Pro Leu Ile Tyr Gly Val Arg Thr Lys Glu Ile
                        295
                                            300
Arg Gln His Ile Glu Lys Met Leu Cys Gly Met Gln Ser Pro Gln Asp
305
                    310
                                         315
                                                             320
Ser Arg
```

<210> 2418

<211> 312

<212> PRT

<213> Mus musculus

<400> 2418

```
Met Phe Asn Ser Ser Gln Phe Thr Pro Lys Tyr Phe Leu Leu Thr Gly
Phe Pro Gly Leu Glu Ala Trp Tyr Pro Trp Leu Ile Phe Pro Phe Cys
Phe Thr Tyr Thr Ile Gly Ile Met Gly Asn Thr Leu Ile Leu Ala Val
Ile Arg Lys Asn Ser Ser Leu His Gln Pro Met Phe Leu Phe Leu Ala
Met Leu Ala Phe Ser Glu Leu Gly Val Ser Ala Ser Thr Leu Pro Thr
Val Leu Ser Ile Phe Leu Leu Gly Ala Asn Lys Ile Cys Phe Glu Ala
Cys Leu Leu Gln Met Phe Ser Ile His Ser Phe Ser Ile Met Glu Ser
            100
                                105
Gly Val Leu Leu Ala Met Ser Val Asp Arg Phe Val Ala Ile Tyr Asn
        115
                            120
Pro Leu Arg Tyr Thr Ala Ile Leu Thr Leu Pro Arg Ile Ala Gly Thr
   130
                        135
                                            140
Ser Leu Thr Leu Gly Leu Lys Ser Leu Leu Leu Met Phe Pro Leu Pro
                    150
                                        155
Phe Leu Leu Lys Arg Leu Pro Phe Cys Gly His Asn Val Leu Ser His
                165
                                    170
Ser Tyr Cys Leu His Ser Asp Leu Ile Gln Leu Pro Cys Gly Asp Thr
            180
                                185
                                                    190
Arg Pro Asn Ser Ile Leu Gly Leu Cys Ile Val Thr Ser Thr Phe Gly
        195
                            200
Leu Asp Ser Leu Leu Ile Val Val Ser Tyr Val Leu Ile Leu Tyr Thr
                        215
Val Leu Asn Ile Thr Ser Gly Glu Gly Arg Arg Lys Ala Leu Asn Thr
                    230
                                        235
Cys Val Ser His Met Cys Ala Val Leu Val Tyr Tyr Val Pro Met Ile
                                    250
                245
Ser Val Ala Leu Val His Arg Phe Met Lys His Ala Val Pro Ala Val
                                                     270
            260
                                265
Arg Leu Leu Leu Ala Asn Ile Tyr Leu Leu Val Pro Pro Met Leu Asn
                            280
Pro Ile Ile Tyr Ser Ala Lys Asn Arg Gln Ile Arg Gln Gly Leu Ile
                        295
Gln Leu Phe Leu Gln Arg Lys Tyr
```

```
<210> 2419
```

<400> 2419

<211> 320

<212> PRT

<213> Mus musculus

```
90
Ile Ser Leu Pro Glu Cys Phe Ala Gln Ile Tyr Ala Ile His Thr Phe
                                105
Met Cys Met Glu Ser Gly Val Phe Leu Cys Met Ala Ile Asp Arg Tyr
                            120
                                                 125
Val Ala Ile Cys Tyr Pro Leu Gln Tyr Pro Ser Ile Val Thr Glu Ala
                        135
                                            140
Phe Val Ile Lys Ala Thr Leu Ser Met Leu Leu Arg Asn Gly Leu Leu
                    150
                                        155
Thr Ile Pro Val Pro Val Leu Ala Ala Gln Arg Gln Tyr Cys Ser Arg
                                    170
Asn Glu Ile Asp His Cys Leu Cys Ser Asn Leu Gly Val Ile Ser Leu
            180
                                185
Ala Cys Asp Asp Ile Thr Val Asn Arg Phe Tyr Gln Leu Ala Leu Ala
        195
                            200
                                                 205
Trp Leu Val Val Gly Ser Asp Met Ile Leu Val Tyr Ala Ser Tyr Ala
                        215
                                            220
Leu Ile Ile Arg Ser Val Leu Arg Leu Asn Ser Thr Glu Ala Ala Ser
                    230
                                        235
Lys Ala Leu Ser Thr Cys Ser Ser His Leu Ile Leu Ile Met Phe Tyr
                                    250
Tyr Thr Ala Ile Val Ile Val Ser Val Thr His Leu Ala Gly Arg Arg
                                265
                                                     270
Val Pro Leu Ile Pro Val Leu Leu Asn Val Met His Ile Val Ile Pro
        275
                            280
                                                 285
Pro Ser Leu Asn Pro Met Val Tyr Ala Leu Arg Thr Gln Glu Leu Lys
                        295
                                            300
Val Gly Phe Arg Lys Val Phe Glu Ser Leu Cys Val Gln Lys Val Asn
                    310
<210> 2420
<211> 322
<212> PRT
<213> Mus musculus
<400> 2420
Asn Arg Ser Gln Thr Ala Asp Pro Lys Asn Ser Ser Thr Val Thr Glu
Phe Ile Leu Val Gly Phe Glu Gln Ser Ser Pro Ser Thr Arg Ala Leu
                                                     30
Leu Phe Thr Leu Phe Leu Ala Leu Tyr Ser Leu Ala Met Ala Met Asn
                            40
Gly Leu Ile Ile Phe Ile Thr Trp Thr Asp Pro Arg Leu Asn Ser Pro
Met Tyr Phe Phe Leu Gly His Leu Ser Phe Leu Asp Val Cys Phe Ile
                    70
                                        75
Thr Thr Ile Pro Gln Met Leu Val His Leu Val Thr Lys Asn His
                                    90
Thr Val Ser Phe Val Ser Cys Met Thr Gln Met Tyr Leu Val Phe Leu
            100
                                105
Val Gly Val Ala Glu Cys Ile Leu Leu Ala Phe Met Ala Tyr Asp Arg
```

120

135

150

165

130

Tyr Val Ala Ile Cys His Pro Leu Asn Tyr Ala Gln Ile Met Ser Gln

Lys Val Cys Val Arg Leu Val Cys Ser Ser Trp Ile Phe Gly Met Val

Asn Gly Ile Phe Leu Glu Tyr Ile Ser Phe Arg Asn Pro Phe Cys Lys

125

175

140

155

```
Asp Asn His Ile Glu Asn Phe Phe Cys Glu Ala Pro Ile Val Ile Ala
                                185
Leu Ser Cys Gly Asp Leu Lys Phe Thr Met Lys Leu Ile Phe Val Asp
        195
                            200
Ala Ile Val Val Leu Leu Ser Pro Met Val Leu Ile Ile Thr Ser Tyr
                        215
                                            220
Ala Arq Ile Leu Ala Ser Ile Leu Arg Arg Ala Ser Ser Ser Gly Arg
                    230
                                        235
Gly Lys Thr Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Val Phe
                245
                                    250
Phe Tyr Thr Ser Ala Met Phe Ser Tyr Met Asn Pro Arg Ser Thr His
            260
                                265
                                                     270
Gly Pro Asp Lys Asp Lys Pro Phe Ser Leu Leu Tyr Thr Ile Ile Thr
                            280
Pro Met Cys Asn Pro Val Ile Tyr Ser Phe Arg Asn Lys Glu Met Lys
                        295
Gly Ala Met Gly Arg Ala Leu Gly Ile Gly Ser Leu Ala Gln Ala Glu
                    310
                                        315
Ser Val
```

```
<210> 2421
<211> 322
<212> PRT
```

<213> Mus musculus

<400> 2421 Arg Pro Gln Lys Gly Asp Ser Arg Asn Ser Ser Ser Thr Val Thr Glu 10 Phe Ile Leu Val Gly Phe Glu Gln Ser Ser Pro Ser Thr Arg Ala Leu 25 30 Leu Phe Thr Leu Phe Leu Ala Leu Tyr Ser Leu Ala Met Ala Met Asn Gly Leu Ile Ile Phe Ile Thr Trp Thr Asp Pro Arg Leu Asn Ser Pro 55 Met Tyr Phe Phe Leu Gly His Leu Ser Phe Leu Asp Val Cys Phe Ile 70 75 Thr Thr Ile Pro Gln Met Leu Val His Leu Val Thr Lys Asn His 85 90 Thr Val Ser Phe Ala Ser Cys Leu Thr Gln Met Tyr Leu Val Phe Gly 100 105 Val Gly Val Ala Glu Cys Ile Leu Leu Ala Phe Met Ala Tyr Asp Arg 115 120 Tyr Val Ala Ile Cys His Pro Leu Asn Tyr Ala Gln Ile Met Ser Gln 135 140 Lys Val Cys Val Arg Leu Val Cys Ser Ser Trp Ile Phe Gly Met Val 150 155 Asn Gly Ile Leu Leu Asp Tyr Met Thr Phe Arg Gly Pro Phe Cys Arg 165 170 175 Glu Asn His Ile Glu Asn Phe Phe Cys Glu Ala Pro Ile Val Ile Ala 180 185 Leu Ser Cys Gly Asp Pro Glu Phe Ser Leu Lys Val Ile Phe Met Asp 195 200 205 Ala Ile Val Val Leu Leu Ser Pro Met Val Leu Ile Val Thr Ser Tyr 210 220 215 Ala Arg Ile Leu Ala Ser Ile Leu Arg Arg Ala Ser Ser Ala Gly Arg 230 235 Gly Lys Thr Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Val Phe

```
245
                                    250
Phe Tyr Thr Ser Ala Met Phe Ser Tyr Met Asn Pro Arg Ser Thr His
                                                    270
                                265
Gly Pro Asp Lys Asp Lys Pro Phe Ser Leu Leu Tyr Thr Ile Ile Thr
       275
                            280
Pro Met Cys Asn Pro Val Ile Tyr Ser Phe Arg Asn Lys Glu Met Lys
                        295
Gly Ala Met Gly Arg Ala Leu Gly Arg Gly Ser Leu Ala Gln Ala Glu
                                        315
Ser Val
<210> 2422
<211> 308
<212> PRT
<213> Mus musculus
<400> 2422
Met Arg Asn Phe Ser Val Val Ser Glu Phe Ile Leu Leu Gly Leu Ser
               5
                                    10
Asp Asp Ala Gln Val Gln Ala Leu Leu Phe Val Ala Phe Leu Val Ile
            20
                                25
Tyr Val Leu Thr Leu Thr Gly Asn Ser Met Ile Leu Leu Val Ile Arg
                            40
Val Asp Ala His Leu Arg Ser Pro Met Tyr Phe Phe Leu Gly His Leu
                        55
Ser Phe Leu Asp Leu Leu Tyr Ser Ser Val Ser Thr Pro Lys Met Leu
                                        75
                    70
Glu Asn Leu Val Ser Glu Thr Lys Thr Ile Pro Val Lys Gly Cys Leu
                                    90
                                                        95
                85
Ala Gln Ala Phe Phe Val Phe Ala Ile Gly Gly Thr Glu Ala Leu Leu
           100
                                105
                                                    110
Leu Ala Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys His Pro Leu
                            120
                                                125
Leu Tyr Gly Gln Met Met Asn Asp Trp Phe Cys Gln Val Leu Val Trp
                        135
                                            140
Gly Ser Trp Ile Leu Ala Ile Leu Asn Ser Leu Ile Asn Thr Leu Leu
                    150
                                        155
Ala Val Ser Leu Asp Phe Cys His Tyr Gly Thr Ile His Asn Tyr Asn
                165
                                    170
                                                        175
Cys Glu Phe Pro Ser Leu Phe Pro Leu Ser Cys Ser Asp Val Ser Thr
           180
                                185
                                                    190
Asn Ala Thr Ala Ile Val Cys Ser Phe Val Ile His Ala Ser Gly Thr
       195
                            200
                                                205
Phe Leu Leu Val Val Gly Ser Tyr Gly Cys Ile Phe Ser Thr Ile Leu
                        215
                                            220
Asn Met Ser Ser Thr Arg Gly Arg Ser Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Leu Thr Val Val Met Leu Tyr Phe Gly Ser Ala Cys Leu Arg
                                    250
Tyr Val Met Pro Thr Ser Gly Ser Pro Val Glu Met Tyr Phe Ser Val
            260
                                265
Gln Tyr Ser Val Ile Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu
                            280
Lys Asn Gln Glu Val Lys Ala Ala Met Arg Lys Leu Leu Ala Arg Cys
                                            300
```

Tyr Gln His Phe

```
<210> 2423
<211> 316
<212> PRT
<213> Mus musculus
<400> 2423
Met Glu Leu Trp Asn Ser Thr Leu Glu Ser Gly Phe Ile Leu Val Gly
Ile Leu Asn Gly Ser Ser Ser Pro Glu Leu Leu Cys Ala Ile Val Thr
            20
                                25
Ala Leu Tyr Met Leu Ala Leu Ile Ser Asn Gly Leu Leu Leu Val
        35
                            40
Ile Thr Val Asp Ala Arg Leu His Val Pro Met Tyr Leu Leu Leu Arg
                        55
                                             60
Gln Leu Ser Leu Ile Asp Leu Leu Phe Thr Ser Val Val Thr Pro Lys
                    70
                                        75
                                                             80
Ala Val Met Asp Phe Leu Leu Arg Asp Asn Thr Ile Ser Phe Gly Gly
                85
                                    90
Cys Ala Leu Gln Met Ala Leu Ala Leu Met Leu Gly Ser Ala Glu Asp
                                105
Leu Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu Asn Tyr Met Val Phe Met Ser Pro Thr Val Cys Trp Leu Ile
                        135
                                             140
Val Ser Thr Ser Trp Ile Leu Ala Ser Leu Thr Ala Val Gly His Thr
                    150
                                        155
Val Tyr Thr Met His Phe Pro Phe Cys Met Ser Gln Glu Ile Arg His
                                     170
                165
Leu Leu Cys Glu Ile Leu Pro Leu Leu Lys Leu Ser Cys Val Asp Thr
                                185
Ser Gln Tyr Glu Leu Met Val Tyr Val Thr Gly Val Thr Phe Leu Leu
        195
                            200
Leu Pro Leu Ser Ala Ile Val Thr Ser Tyr Thr Leu Ile Leu Ser Thr
                        215
Val Leu His Met Pro Ser Asn Glu Gly Lys Lys Lys Ala Leu Val Thr
                    230
                                        235
Cys Leu Ser His Leu Met Val Val Gly Met Phe Tyr Gly Ala Ala Thr
                                     250
Phe Met Tyr Val Leu Pro Ser Ser Leu His Ser Ala Lys Gln Asp Asn
                                265
Ile Ile Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Gly Ala Leu Arg Arg Val
                        295
Leu Gly Arg Tyr Ile Leu Pro Ala His Leu Thr Leu
                    310
<210> 2424
<211> 316
<212> PRT
<213> Mus musculus
<400> 2424
Met Glu Asn Ile Thr Asn Ile Ser Glu Phe Ile Leu Met Gly Phe Pro
                                    10
```

Thr Ala Pro Trp Leu Gln Ile Leu Leu Phe Ser Ile Phe Phe Ile Thr

```
25
Tyr Val Phe Val Leu Leu Glu Asn Leu Val Ile Ile Leu Thr Val Trp
Val Thr Gly Ser Leu His Lys Pro Met Tyr Tyr Phe Leu Ser Thr Met
                        55
Ser Phe Leu Glu Ala Trp Tyr Ile Ser Val Thr Val Pro Lys Met Leu
                    70
                                        75
Ala Gly Phe Leu Phe Arg Pro Asn Thr Ile Ser Phe Leu Gly Cys Met
                                    90
                8.5
Thr Gln Leu Tyr Phe Phe Met Ser Leu Ala Cys Thr Glu Cys Val Leu
           100
                                105
                                                    110
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Trp Pro Leu
                            120
                                                125
       115
Arg Tyr Pro Val Met Met Thr Thr Gly Phe Cys Val Gln Leu Thr Ile
   130
                        135
                                            140
Ser Ser Trp Val Ser Gly Phe Thr Ile Ser Met Ala Lys Val Tyr Phe
                    150
                                        155
Ile Ser Arg Val Ala Phe Cys Gly Asn Asn Val Leu Asn His Phe Phe
                165
                                    170
Cys Asp Val Ser Pro Ile Leu Lys Leu Ala Cys Met Asn Leu Ser Met
           180
                                185
                                                    190
Ala Glu Thr Val Asp Phe Ala Leu Ala Ile Val Ile Leu Ile Phe Pro
       195
                            200
                                                205
Leu Ser Ala Thr Val Leu Ser Tyr Gly Phe Ile Val Ser Thr Val Leu
                        215
                                            220
Gln Ile Pro Ser Ala Thr Gly Gln Arg Lys Ala Phe Ser Thr Cys Ala
                    230
                                        235
Ser His Leu Thr Val Val Val Ile Phe Tyr Thr Ala Val Ile Phe Met
                                    250
                245
Tyr Val Arg Pro Arg Ala Ile Ala Ser Phe Asn Ser Asn Lys Leu Ile
            260
                                265
                                                    270
Ser Ala Ile Tyr Ala Val Phe Thr Pro Met Leu Asn Pro Ile Ile Tyr
                            280
                                               285
Cys Leu Arg Asn Lys Glu Val Lys Asp Ala Ile Arg Lys Thr Ile Ala
                        295
Gly Gly Arg Ala Pro Ala Leu Gly Glu Ser Ile Ser
                    310
```

<210> 2425 <211> 313

<212> PRT

<213> Mus musculus

<400> 2425

Met Gln Phe Glu Asn Phe Thr Thr Val Phe Thr Glu Phe Val Leu Leu 10 Gly Leu Ser Gly Arg Gln Asp Val Gln Gln Gly Leu Phe Ala Leu Phe 25 Phe Leu Val Tyr Gly Ile Thr Val Ile Ala Asn Leu Gly Met Ile Leu 40 Leu Ile Lys Leu Asp Ser Arg Leu His Thr Pro Met Tyr Tyr Phe Leu 55 60 Ser Asn Leu Ser Phe Cys Asp Ile Cys Tyr Ser Thr Ile Ile Ser Pro 70 75 Lys Met Leu Ala Asp Phe Leu Ser Lys Glu Lys Arg Ile Pro Tyr Asn 85 90 Leu Cys Ala Ile Gln Leu Tyr Phe Phe Gly Ala Phe Ala Asp Val Glu

```
Cvs Leu Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
Asn Pro Leu Leu Tyr Thr Ile Lys Met Ser Lys Lys Leu Cys Ile Gln
                        135
                                            140
Leu Val Ala Val Ala Tyr Ala Ile Gly Leu Val Asp Ser Thr Ile His
                    150
                                        155
Thr Ser Cys Ala Phe Arg Leu Ser Phe Cys Asn Ser Asn Val Ile Asn
                                    170
His Phe Phe Cys Asp Leu Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp
            180
                                185
Thr Ser Ile Asn Glu Ile Val Met Phe Thr Leu Ile Gly Cys Val Val
                                                205
       195
                            200
Gly Cys Ser Ile Val Thr Val Leu Leu Ser Tyr Cys Tyr Ile Ile Ala
                        215
Thr Ile Cys Arg Met Asn Ser Ala Glu Gly Arg His Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ala Ser His Leu Met Ala Leu Ala Ile Phe Tyr Gly Thr Leu
Leu Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Met Asp Thr Asp
                                                    270
                                265
Lys Met Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                            280
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Lys
                        295
                                            300
Ala Ile Asn Ile Asn Leu Trp Pro Gly
```

<210> 2426

<211> 323

<212> PRT

<213> Mus musculus

<400> 2426

Met Phe Tyr Leu Leu Ser Val Asp Glu Glu Lys Ile Lys Ala Glu Lys Ser Asn Ala Ser Ser Leu Ile Glu Phe Ile Leu Leu Gly Phe Ser Asp 25 Val Pro Asn Leu Gln Trp Ile Leu Phe Gly Ile Phe Leu Ile Met Tyr Leu Thr Ile Leu Met Cys Asn Ser Thr Ile Val Leu Ile Thr Arg Thr Asp Pro Ala Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser Asn Phe Ser Phe Val Glu Ile Cys Tyr Val Thr Val Thr Ile Pro Arg Met Leu Val 90 Asp Leu Cys Thr Gln Lys Gly Asn Ile Ser Ile Leu Ala Cys Ala Thr 100 105 110 Gln Met Cys Phe Ile Leu Met Leu Gly Gly Thr Glu Cys Leu Leu Leu 120 125 115 Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu His 135 140 Tyr Ser Leu Val Met Asn His Arg Ile Cys Thr Gln Leu Val Ala Ala 150 155 Cys Trp Ile Ser Val Ile Pro Val Val Ile Gly Gln Thr Tyr Gln Ile 165 170 175 Phe Ser Leu Pro Phe Cys Gly Ser Asn Arg Ile Asn His Phe Ile Cys 185 Asp Ile Pro Pro Val Leu Lys Leu Ala Cys Gly Asp Thr Phe Val Asn

```
195
                            200
                                                205
Glu Ile Ala Val Tyr Val Val Ala Met Val Phe Val Met Val Pro Phe
                                            220
                        215
Met Leu Ile Ile Phe Ser Tyr Cys Lys Ile Ile Cys Ser Ile Leu Lys
                                        235
                    230
Leu Ser Ser Ala Lys Gly Arg Thr Lys Ala Phe Ser Thr Cys Ser Ser
                245
                                    250
His Leu Ile Val Val Leu Phe Tyr Gly Thr Ala Ser Ile Thr Tyr
                                265
Leu Gln Pro Lys Pro Asn Gln Ser Glu Ile Thr Gly Lys Leu Leu Ser
                            280
                                                285
Leu Phe Tyr Thr Ile Leu Ile Pro Thr Leu Asn Pro Ile Ile Tyr Thr
                        295
                                            300
Leu Arg Asn Lys Asp Ile Met Ala Ala Leu Arg Lys Leu Val Ser Lys
                    310
                                        315
Ile Leu Val
```

<210> 2427

<211> 311

<212> PRT

<213> Mus musculus

<400> 2427

Met Thr Phe Glu Ile Ile Thr Val Phe Thr Asp Phe Val Leu Leu Gly Leu Ser Gly Arg Gln Asp Val Gln Gln Gly Leu Phe Ala Leu Phe Phe 20 Leu Val Tyr Gly Ile Thr Val Ile Ala Asn Leu Gly Met Ile Leu Leu 35 40 Ile Lys Leu Asp Ser Arg Leu His Thr Pro Met Tyr Tyr Phe Leu Ser 50 55 Asn Leu Ser Phe Cys Asp Ile Cys Tyr Ser Thr Ile Ile Ser Pro Lys 70 80 Met Leu Ala Asp Phe Leu Leu Lys Glu Lys Arg Ile Pro Cys Asn Leu 90 Cys Ala Leu Gln Met Tyr Phe Leu Gly Val Phe Gly Asp Thr Glu Cys 105 Leu Ile Leu Ala Val Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Thr Thr Met Ser Thr Lys Leu Tyr Ile Gln Leu 135 140 Val Ala Val Ala Tyr Ala Val Gly Leu Val Asp Ser Ala Val His Thr 150 155 Ser Cys Thr Phe Gln Leu Ser Phe Cys Asn Ser Asn Val Ile Asn His 165 170 Phe Ser Cys Asp Leu Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr 180 185 190 Ser Ile Asn Glu Ile Leu Leu Phe Ile Phe Ser Thr Leu Val Ile Gly 200 205 Cys Ser Ile Phe His Ile Leu Leu Ser Tyr Cys Tyr Ile Ile Val Thr 215 220 Ile Cys Arg Met Asn Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Met Ala Val Ala Ile Phe His Gly Thr Leu Phe 250 245 Met Tyr Phe Gln Pro Ser Ser Leu Tyr Ser Met Asp Thr Asp Lys Met 265

Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Lys Val Ile 295 Asn Ile Asn Leu Trp Pro Gly <210> 2428 <211> 314 <212> PRT <213> Mus musculus <400> 2428 Met Lys His Thr Asp Ile Arg Glu Glu Asp Asn Ala Ser Thr Val Thr Gln Phe Leu Leu Gly Phe Ser Asp Leu Pro Asn Leu Gln Ser Phe 25 Leu Phe Gly Val Phe Ser Ile Met Tyr Leu Ile Met Leu Ile Ala Asn 35 40 Ser Phe Ile Ile Val Ile Thr Lys Leu Asp Pro Thr Leu Gln Lys Pro 55 Met Tyr Phe Phe Leu Val Asn Phe Ser Phe Leu Glu Ile Cys Tyr Val Ser Val Ile Leu Pro Arg Val Leu Tyr Ser Ile Trp Thr Gln Asp Arg 85 Asn Ile Ser Leu Leu Ala Cys Ala Thr Gln Met Cys Phe Phe Leu Met 105 Leu Ala Ala Thr Glu Ser Ile Phe Leu Ala Val Met Ser Tyr Asp Arg 120 Tyr Val Ala Ile Cys Ser Pro Leu His Tyr Pro Leu Val Met Ser Pro 135 Arg Lys Cys Arg Gln Leu Ala Ala Gly Ser Trp Leu Gly Gly Met Pro 150 155 Phe Gln Val Gly Gln Thr Cys Gln Ile Phe Ser Leu His Phe Cys Asn 165 170 175 Ser Asn Gln Ile Glu His Phe Phe Cys Asp Ile Pro Pro Val Leu Lys 180 185 Leu Ala Cys Gly Asp Thr Ser Val Ile Glu Met Tyr Val Tyr Val Val 195 200 Ala Ile Leu Leu Ala Ala Ile Pro Phe Ile Leu Ile Leu Thr Ser Tyr 215 Ser Lys Ile Ile Ala Thr Ile Leu Arg Leu Pro Thr Ala Glu Gly Arg 230 235 Ser Lys Ala Phe Phe Thr Cys Ser Ser His Leu Val Val Val Leu 245 250 Phe Phe Ala Pro Ala Ser Ile Thr Tyr Leu Met Pro Lys Ser Ser His 265 270 Ser Ala Val Ser Asp Lys Phe Leu Ser Leu Phe Tyr Thr Ile Ile Thr 280 Pro Val Phe Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile 295 300 Ala Ala Leu Arg Arg Leu Leu Leu Thr Thr 305 310

<210> 2429 <211> 310

<212> PRT

```
<400> 2429
Met Asn Asn Lys Thr Val Phe Ser Gln Phe Leu Leu Gly Leu Pro
Ile Pro Pro Glu His Gln His Leu Phe Tyr Ala Leu Phe Leu Ala Met
Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Asn Leu Ile Ile
                            40
Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu
Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu
                    70
Gln Asn Met Gln Ser Gln Asp Thr Ser Ile Thr Tyr Val Gly Cys Leu
                                    90
                                                         95
Thr Gln Met Tyr Phe Leu Leu Val Phe Gly Asp Leu Glu Ser Phe Leu
                                105
            100
Leu Leu Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu
                            120
                                                 125
His Tyr Thr Ser Ile Met Ser Leu Lys Leu Cys Val Tyr Leu Val Leu
                        135
                                             140
Met Ser Trp Val Phe Asn Leu Leu Tyr Ser Met Leu His Ser Leu Leu
                                        155
Leu Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Arg His Phe Phe
                                    170
                165
Cys Asp Ile Pro Ala Leu Leu Lys Leu Thr Cys Ser Asp Ile His Ile
                                185
                                                     190
Asn Glu Leu Met Ile Leu Val Leu Gly Gly Leu Thr Met Val Ile Pro
        195
                            200
                                                 205
Phe Leu Leu Ile Val Val Ser Tyr Val Gln Ile Val Ser Ser Ile Leu
                        215
                                             220
Asn Ile Ser Ser Ala Arg Val Ile Gln Lys Ile Phe Ser Thr Cys Gly
                    230
                                                             240
Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Phe Gly Leu
                                    250
                                                         255
Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Ile Val Met
                                265
                                                     270
Ala Met Met Cys Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Arg Leu Arg Asn Arg Asn Met Lys Glu Ala Leu Ile Arg Val Leu Phe
                        295
                                             300
Lys Lys Lys Ile Ser Leu
305
<210> 2430
<211> 313
<212> PRT
<213> Mus musculus
<400> 2430
Met Ala Asn Ser Asn His Ser Ala Val Ser Glu Phe Ile Leu Val Gly
 1
                                    10
Leu Thr Asp Asp Ser Glu Leu Gln Val Ser Leu Phe Gly Val Phe Leu
            20
Val Ile Tyr Leu Thr Ser Val Val Gly Asn Val Gly Leu Ile Val Leu
        35
                            40
Ile Gln Val Ser Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Thr
```

```
His Leu Ala Phe Ile Asp Phe Cys Phe Thr Ser Ser Val Thr Pro Asn
                    70
Thr Leu Val Asn Phe Leu Arg Glu Val Lys Ser Ile Thr Phe Tyr Ala
                                    90
Cys Ala Thr Gln Leu Cys Cys Phe Val Thr Phe Val Val Cys Glu Leu
                                                    110
                                105
Tyr Leu Leu Ser Ile Met Ala Tyr Asp Arg Tyr Val Ala Ile Trp Asn
                            120
Pro Leu Leu Tyr Ala Val Arg Met Pro Arg Glu Leu Cys Leu Gln Val
                        135
Ile Ala Ser Thr Tyr Ile Tyr Gly Phe Thr Val Gly Leu Ala Gln Ala
                    150
                                        155
Val Ala Thr Phe Arg Leu Ser Phe Cys Gly Ser Asn Val Ile Asn His
                                    170
Phe Tyr Cys Asp Asp Val Pro Leu Val Ala Leu Ala Cys Ser Asp Thr
            180
                                185
His Val Lys Glu Leu Met Leu Leu Ile Ile Ala Gly Phe Asn Thr Leu
        195
                            200
Cys Ser Leu Val Ile Val Val Ile Ser Tyr Ile Cys Ile Leu Phe Ala
                        215
Ile Leu Arg Ile His Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Ser Ile Thr Ile Phe Tyr Gly Thr Val Ser
                                    250
Phe Met Tyr Leu Gln Pro Lys Ser Ser His Ser Leu Asn Thr Asp Lys
Phe Ala Ser Val Phe Tyr Val Val Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Ser Ala Leu Lys Arg Ile
                        295
Val Glu Lys Leu Ser Ser Ala Ile Lys
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 2431

Met Pro Gly Asn Asn Gln Thr Ile Ile Ser Gln Phe Leu Leu Gly Leu Pro Ile Ala Pro Glu Tyr Glu His Leu Phe Tyr Ala Leu Phe Leu Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu 35 40 Ile Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 60 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys 70 75 80 Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Ser Ile Pro Tyr Ala Gly 90 Cys Leu Thr Gln Val Tyr Phe Phe Leu Phe Phe Ala Ala Leu Glu Asn 100 105 110 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe 120 125 Pro Leu His Tyr Ala Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu 135 140 Val Leu Leu Ile Trp Val Leu Thr Thr Leu Tyr Ala Met Leu His Thr

```
145
                    150
                                        155
Leu Leu Leu Thr Arg Leu Ser Phe Cys Glu Asn Asn Val Ile Pro His
                                    170
                165
Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile
                                185
                                                    190
            180
His Ile Asn Glu Leu Val Ile Leu Ile Ile Gly Gly Leu Val Val Leu
                            200
                                                205
Leu Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala Arg Ile Ile Ser Ser
                        215
Ile Leu Lys Val Pro Ser Thr Arg Gly Ile His Lys Leu Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                245
                                    250
Gly Ile Tyr Leu Gly Pro Ser Ala Asn Asn Ser Thr Leu Lys Asp Ile
Val Met Ser Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Leu Lys Lys Val
                        295
                                            300
Phe Gln Lys Lys Ser Leu Leu
<210> 2432
<211> 312
<212> PRT
<213> Mus musculus
<400> 2432
Met Pro Gly Lys Asn Gln Thr Val Ile Ser Arg Phe Ile Leu Leu Gly
Leu Pro Ile Pro Pro Glu His Gln His Leu Phe Tyr Ala Leu Phe Leu
Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Val Ile Ile Val Leu
        35
                            40
Ile His Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                        55
Asn Leu Ser Phe Thr Asp Leu Cys Phe Ser Thr Val Thr Met Pro Asn
                    70
                                        75
Phe Leu Gln Asn Met Gln Ser Gln Val Ser Ser Ile Pro Tyr Ala Gly
                                    90
Cys Leu Ala Gln Met Tyr Phe Phe Leu Phe Phe Gly Asp Val Glu Ser
            100
                                105
Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
Pro Leu His Tyr Thr Arg Ile Met Ser Pro Asn Leu Cys Val Ser Met
                        135
                                            140
Val Leu Leu Ser Trp Ala Leu Thr Thr Leu Tyr Ala Met Leu His Thr
                    150
                                        155
Leu Leu Thr Arg Leu Ser Phe Cys Lys Asn Asn Val Ile Pro His
                                    170
Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile
                                185
                                                    190
            180
His Ile Asn Glu Leu Met Ile Met Ile Ile Gly Ala Leu Val Val Ile
                            200
                                                205
        195
Leu Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala His Ile Val Ser Ser
                        215
                                            220
Ile Leu Lys Val Pro Ser Thr Arg Gly Ile His Lys Val Phe Ser Thr
                    230
                                        235
```

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Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Ser Val Ile
Val Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Asp Thr
Val Met Ser Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Leu Lys Arg Val
                        295
Leu Gln Lys Lys Ile Lys Leu Ser
<210> 2433
<211> 315
<212> PRT
<213> Mus musculus
<400> 2433
Met Glu Arg Gly Asn Gln Thr Val Val Ser Glu Phe Leu Leu Leu Gly
Leu Pro Ile Glu Pro His Gln Gln Asp Leu Phe Tyr Ala Leu Phe Leu
                                25
Ser Met Tyr Leu Thr Thr Ala Leu Gly Asn Leu Ile Ile Ile Leu
                            40
Ile His Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                        55
                                            60
Asn Leu Ser Phe Ser Asp Phe Cys Phe Ser Ser Val Thr Ile Pro Lys
                   70
                                        75
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly
                                    90
Cys Leu Ala Gln Met Tyr Phe Phe Leu Leu Phe Ala Asp Leu Glu Ser
           100
                                105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
                                                125
Pro Leu His Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Leu Cys Leu
                       135
                                            140
Val Ala Leu Ser Trp Leu Leu Thr Thr Val Ile Ser Leu Ser His Thr
                   150
                                        155
Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asn Asn Val Ile Pro His
               165
                                    170
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile
           180
                                185
                                                    190
Gln Ile Asn Lys Leu Met Ile Phe Ile Leu Gly Gly Leu Val Ile Ile
       195
                            200
Val Pro Phe Leu Leu Ile Phe Ser Ser Tyr Ala Arg Ile Val Ser Ser
                        215
                                            220
Ile Leu Lys Val Pro Ser Ser Arg Ser Ile Arg Lys Ala Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                                    250
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Ile Lys Glu Thr
                                265
                                                    270
Val Met Ala Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Phe Arg Asn Gln Asp Ile Lys Gly Ala Phe Lys Lys Val
                        295
Phe Ser Lys Gln Met Ala Asn Phe Ser Leu Arg
```

```
<212> PRT
<213> Mus musculus
<400> 2434
Met Leu Thr Gly Lys Leu Val Leu Asn Gln Ser Gly Thr Pro Glu Phe
1
Val Phe Arg Val Phe Thr Asn Ala Pro Glu Phe Gln Ala Leu Leu Phe
                                25
Thr Leu Phe Leu Leu Tyr Leu Met Ile Phe Cys Gly Asn Thr Ala
                            40
Ile Ile Trp Val Val Cys Thr His Thr Ser Leu His Thr Pro Met Tyr
                        55
Phe Phe Leu Ser Ser Leu Ser Phe Leu Glu Ile Cys Tyr Thr Thr Asp
                    70
Val Val Pro Leu Met Leu Ser Asn Ile Phe Gly Thr Gln Lys Pro Ile
                                     90
Ser Leu Ala Gly Cys Gly Thr Gln Met Phe Phe Leu Thr Leu Gly
            100
                                105
Gly Thr Asp Cys Phe Leu Leu Ala Ile Met Ala Tyr Asp Arg Tyr Val
        115
                            120
                                                 125
Ala Ile Cys His Pro Leu His Tyr Asn Leu Ile Met Thr Lys Lys Leu
                        135
                                            140
Cys Val Gln Met Val Met Gly Ser Leu Ser Leu Ala Leu Phe Leu Ser
                    150
                                        155
Leu Gln Leu Thr Ala Leu Ile Phe Thr Leu Pro Phe Cys Gly His Tyr
                165
                                    170
                                                         175
Leu Glu Ile Asn His Phe Leu Cys Asp Val Pro Pro Val Leu Arg Leu
            180
                                185
                                                     190
Ala Cys Ala Asp Ile His Val His Gln Ala Val Leu Tyr Val Val Gly
        195
                            200
                                                 205
Ile Leu Val Leu Thr Val Pro Phe Leu Leu Ile Phe Ile Ser Tyr Val
                        215
                                             220
Phe Ile Val Ser Thr Ile Leu Arg Met Arg Ser Ala Glu Gly Arg Gln
                    230
                                        235
Arg Ala Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Leu Leu Gln
                245
                                    250
                                                         255
Tyr Gly Gly Cys Ser Leu Val Tyr Leu Arg Pro Arg Ser Ser Ser Ser
            260
                                265
                                                     270
Asp Asp Glu Asp Arg Gln Ile Ala Leu Val Tyr Thr Phe Val Thr Pro
                            280
                                                 285
Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly
                        295
                                            300
Ala Leu Arg Asn Ser Ile Phe Cys Lys Ser Ala Ser His Cys Ser
<210> 2435
<211> 319
<212> PRT
<213> Mus musculus
<400> 2435
Met Val Asp Arg Asn Pro Phe Phe Asn Lys Ser Gly Pro Pro Glu Phe
                5
                                    10
Val Phe Arg Val Leu Thr Asn Val Pro Glu Phe Gln Ala Ile Leu Phe
            20
```

<210> 2434 <211> 319

```
Thr Leu Phe Phe Leu Leu Tyr Leu Met Ile Leu Cys Gly Asn Thr Thr
Ile Ile Trp Val Val Cys Asn His Ser Ser Leu His Thr Pro Met Tyr
Phe Phe Leu Gly Ser Leu Ser Phe Val Glu Ile Cys Tyr Ile Thr Asp
Val Val Pro Leu Ile Leu Ser Asn Ile Phe Gly Asp Gln Lys Pro Ile
Ser Leu Ala Gly Cys Gly Thr Gln Met Phe Phe Ser Val Phe Gly
           100
                                105
Cys Thr Asp Cys Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val
       115
                            120
Ala Ile Cys His Pro Leu His Tyr Asn Leu Ile Met Thr Gln Lys Leu
                       135
                                            140
Cys Val Gln Met Val Ile Gly Ser Leu Ser Leu Ala Leu Leu Ser
                   150
                                        155
Leu Glu Leu Thr Ala Phe Thr Phe Thr Leu Pro Phe Cys Arg His Arg
                                    170
                                                        175
               165
Leu Glu Ile Asn His Phe Leu Cys Asp Val Ala Pro Ile Met Arg Leu
                               185
                                                    190
           180
Ala Cys Ala Asp Ile His Val Asn Gln Ala Val Leu Tyr Val Val Ser
                            200
                                                205
       195
Ile Leu Val Leu Thr Val Pro Phe Leu Leu Ile Phe Ile Ser Tyr Val
                       215
                                            220
Phe Ile Ala Ser Thr Ile Leu Arg Met His Ser Ala Glu Gly Arg Gln
                   230
                                        235
Arg Ala Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Leu Leu Gln
               245
                                    250
Tyr Gly Cys Cys Ser Leu Val Tyr Leu Arg Pro Arg Ser Ser Thr Ser
           260
                                265
Glu Asp Glu Asp Arg Gln Ile Ala Leu Val Tyr Ile Phe Gly Thr Pro
                            280
Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Ile Lys Asp
                       295
                                           300
Ala Leu Arg Asn Ser Phe Phe His Val Pro Ala Ser Asp Thr Ser
```

<211> 309

<212> PRT

<213> Mus musculus

<400> 2436

 Met
 Ala
 Asp
 Ile
 His
 Asp
 Val
 Thr
 Glu
 Phe
 Leu
 Phe
 Leu
 Gly
 Leu
 Ser
 10
 10
 10
 15
 15
 15
 Ser
 Asp
 Phe
 Leu
 Phe
 Leu
 Leu
 Leu
 Leu
 Phe
 Val
 Ile
 Phe
 Leu
 Leu
 Leu
 Leu
 Phe
 Val
 Ile
 Phe
 Leu
 Leu
 Leu
 Ile
 Val
 Val
 Thr
 Val
 Val
 Thr
 Val
 Val
 Val
 Thr
 Val
 Val</td

```
115
                            120
His Tyr Thr Ser Ile Met Asn Arg Asn Val Cys Ala Val Leu Val Gly
                        135
                                            140
Thr Ala Trp Ile Gly Gly Phe Val His Ser Phe Ala Gln Ile Leu Leu
                    150
                                        155
Ile Phe Pro Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Tyr Phe
                165
                                    170
                                                         175
Cys Asp Leu Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Phe Leu
                                185
Ile Gly Leu Leu Ile Val Ala Asn Ala Gly Thr Leu Ser Val Ile Ser
       195
                            200
Phe Val Val Leu Leu Ala Ser Tyr Val Val Ile Leu Phe His Leu Arg
                        215
Thr Gln Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser
                    230
                                        235
His Val Thr Val Val Ile Leu Phe Phe Gly Pro Cys Val Phe Ile Tyr
                                    250
Leu Arg Pro Ser Asp Thr Leu Pro Val Asp Lys Met Ile Ala Val Phe
            260
Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg
                            280
Asn Ala Lys Val Lys Lys Thr Met Lys Ser Leu Trp Phe Arg Thr Met
                        295
                                            300
Lys Val Asp Glu Lys
305
<210> 2437
<211> 309
<212> PRT
<213> Mus musculus
<400> 2437
Met Ala Asp Ile His Asn Val Thr Glu Phe Ile Phe Leu Gly Leu Ser
                                    10
Ser Asn Gln Glu Val Gln Lys Val Cys Phe Val Ile Phe Leu Leu Leu
                                25
Tyr Met Ala Ile Val Leu Gly Asn Leu Leu Met Val Val Thr Val Val
Ala Ser Arg Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Gly Tyr Leu
Ser Phe Val Glu Ile Cys Tyr Ser Ser Thr Thr Ala Pro Lys Leu Ile
                    70
                                        75
Leu Asp Leu Leu Ala Glu Lys Lys Ser Ile Ser Val Trp Gly Cys Met
Thr Gln Leu Phe Phe Met His Phe Phe Gly Gly Thr Glu Ile Phe Leu
                                105
                                                    110
Leu Thr Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Thr Ser Ile Met Asn Gln Ser Val Cys Ala Val Leu Met Gly
   130
                                            140
Thr Ala Trp Ile Gly Gly Phe Val His Ser Phe Ala Gln Ile Leu Leu
                    150
                                        155
Ile Phe Pro Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Tyr Phe
                                    170
                                                         175
Cys Asp Leu Leu Pro Val Leu Lys Leu Ala Cys Ser Asp Thr Phe Leu
                                185
```

Ile Gly Leu Leu Ile Val Val Asn Gly Gly Thr Leu Ser Val Ile Ser 200

Phe Val Val Leu Leu Ala Ser Tyr Gly Val Ile Leu Phe His Leu Arg 215 Thr Gln Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser 230 235 His Val Thr Val Val Ile Leu Phe Phe Gly Pro Cys Val Phe Ile Tyr 245 250 Leu Arg Pro Ser Asp Thr Leu Pro Val Asp Lys Met Ile Ala Val Phe 260 Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg 280 285 Asn Ala Glu Val Lys Lys Ala Met Lys Ser Leu Trp Phe Arg Thr Met 295 300 Lys Val Asp Glu Lys 305

<210> 2438 <211> 309 <212> PRT <213> Mus musculus

<400> 2438

Met Glu Asn Lys Arg Asn Val Thr Glu Phe Ile Leu Ile Gly Leu Thr Gln Asn Pro Gln Met Gln Lys Val Val Phe Val Thr Phe Leu Val Leu Tyr Met Thr Thr Ile Ser Gly Asn Leu Leu Ile Val Val Thr Ile Ile Asn Ser Gln Ala Leu Asn Ser Pro Met Tyr Phe Phe Leu Ser His Leu 55 Ser Leu Ile Asp Thr Ile Tyr Thr Ser Ser Ser Ala Pro Lys Leu Ile 70 75 Ala Asp Ser Leu Gln Glu Asn Lys Val Ile Ser Phe Asn Gly Cys Met 90 Ala Gln Val Tyr Ala Glu His Ile Phe Gly Ala Thr Glu Ile Ile Leu 100 105 Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Met Thr Ile Met Ser His Lys Leu Cys Ile Leu Leu Val Gly 130 140 Val Ala Trp Thr Gly Gly Phe Leu His Ala Thr Ile Gln Ile Leu Phe 150 155 Thr Val Trp Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Met 170 Cys Asp Leu Tyr Pro Leu Leu Glu Leu Val Cys Met Asp Thr His Ile 180 185 190 Leu Gly Leu Phe Val Ala Ala Asn Ser Gly Phe Ile Cys Leu Phe Asn 200 Phe Leu Leu Met Gly Ser Tyr Val Ile Ile Leu Arg Ser Leu Lys 215 220 Asn Tyr Ser Leu Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Val Ser 230 235 His Ile Thr Val Val Leu Phe Phe Ile Pro Cys Ile Phe Val Tyr 245 250 Leu Arg Pro Val Thr Thr Leu Pro Leu Asp Lys Gly Val Ala Val Phe 260 265 270 Tyr Thr Met Val Ala Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg 280 Asn Ala Glu Val Lys Asn Ala Ile Lys Lys Leu Trp Arg Lys Lys Val

290 295 300 Thr Ser Asp Ser Asn 305 <210> 2439 <211> 305 <212> PRT <213> Mus musculus <400> 2439 Met Met Asn Gly Thr Leu Val Thr Glu Phe Leu Ile Leu Gly Phe Ser Glu Met Pro His Leu Arg Val Pro Leu Leu Phe Ser Phe Leu Cys Leu 25 Tyr Met Ala Ala Ile Ser Gly Asn Leu Leu Ile Met Val Thr Ile Ser 45 Ala Ser Pro Ala Leu His Thr Pro Met Tyr Phe Phe Leu Val Asn Leu 55 Ala Ile Val Asp Ile Leu Cys Thr Ser Thr Ile Leu Pro Lys Leu Leu 70 75 Asp Ser Met Met Thr Gly Arg Thr Ile Ser Tyr Gly Gly Cys Met Ala 85 90 Gln Leu Phe Phe Phe Thr Trp Ser Leu Gly Ala Glu Leu Leu Phe 100 105 110 Ser Ala Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Cys Pro Leu His 120 125 Tyr Ser Ala Trp Met Gly Pro Arg Val Cys Ala Phe Leu Ala Gly Ile 135 140 Val Trp Thr Ile Ser Leu Thr Asn Thr Ser Val His Thr Gly Leu Met 150 155 Leu Arg Leu Pro Phe Cys Ser Ser Asn Val Ile Glu His Phe Phe Cys 170 175 165 Glu Ile Pro Pro Leu Leu Lys Leu Ser Cys Ala Pro Thr Gln Leu Asn 180 185 190 Glu Ala Met Ala Phe Ala Ala Asp Val Phe Leu Ala Val Gly Asn Phe 200 Ser Val Thr Ile Leu Ser Tyr Gly Phe Ile Val Ala Ser Ile Leu Lys 215 220 Ile Arg Ser Ala Glu Gly Lys Arg Arg Ala Phe Ser Thr Cys Ser Ala 230 235 His Leu Ile Val Val Thr Met Tyr Tyr Ser Thr Val Ile Tyr Thr Tyr 250 245 Ile Arg Pro Ser Ser Ser Tyr Ser Leu Asn Lys Asp Lys Val Val Ser 265 260 Ile Ile Tyr Thr Ser Val Ala Pro Thr Leu Asn Pro Leu Ile Tyr Thr 275 280 285 Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Arg Leu Leu Ser Cys 295 Cys 305 <210> 2440

<400> 2440

<213> Mus musculus

<211> 314 <212> PRT

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Met Glu Glu Glu Asn Gln Thr Gly Val Val Tyr Phe His Phe Arg Pro
Phe Ser Thr Asn Ser Thr Val Ala Ser Leu Val Phe Val Gly Phe Leu
Leu Leu Tyr Leu Gly Ser Leu Ile Gly Asn Leu Thr Ile Gly Leu Thr
Val Trp Gln Asp His Ser Leu His Thr Pro Met Tyr Phe Phe Leu Phe
Val Leu Ala Thr Leu Glu Leu Gly Tyr Ser Thr Asn Ile Ala Pro Leu
                                        75
Thr Leu Ala Ser Ile Leu Ser Met Gly Lys Met Leu Ile Ser Leu Pro
                                    90
Ser Cys Gly Ala Gln Met Phe Phe Phe Ile Leu Leu Gly Gly Ser Asp
                                105
Cys Val Leu Leu Ala Ile Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
His Pro Leu His Tyr Ser Leu Ile Met Ser Trp Gln Leu Cys Gly Gln
                        135
Met Ala Leu Gly Ser Leu Gly Leu Gly Phe Leu Leu Ser Leu Pro Leu
                    150
                                        155
Thr Ile Leu Ile Cys His Leu Pro Phe Cys Gly His Asn Glu Ile Tyr
                165
                                    170
His Phe Phe Cys Asp Met Pro Ala Val Met Arg Leu Ala Cys Thr Asp
            180
                                185
                                                    190
Thr His Ile His Gln Ala Ala Leu Phe Ala Ile Ser Val Ala Ala Val
       195
                            200
Ala Ile Pro Phe Leu Leu Ile Cys Leu Ser Tyr Gly Cys Ile Val Ala
                        215
Thr Ile Leu Arg Met Thr Ser Ala Glu Gly Lys Arg Arg Ala Phe Ser
                    230
                                        235
Thr Cys Ser Ser His Leu Leu Val Val Leu Gln Tyr Gly Cys Cys
               245
                                    250
Thr Leu Ile Tyr Leu Arg Pro Ser Ser Ser Tyr Ser Pro Glu Glu Gly
                                265
Arg Ala Val Ser Val Val Tyr Thr Phe Phe Ser Pro Leu Leu Asn Pro
                            280
Leu Ile Tyr Ser Leu Arg Asn Gln Glu Val Thr Asp Ala Val Lys Arg
                        295
Leu Leu Thr Arg Met Phe Trp Phe Arg Lys
```

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<210> 2441
<211> 312
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<400> 2441

Met Glu Pro Gly Asn Tyr Thr Val Val Thr Glu Phe Ile Leu Leu Gly 10 Leu Thr Asp Asp Ile Thr Val Ser Val Ile Leu Phe Val Met Phe Leu 20 Ile Val Tyr Ser Val Thr Leu Met Gly Asn Leu Asn Ile Ile Val Leu 35 40 Ile Arg Thr Ser Pro Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser 50 55 60 His Leu Ala Phe Leu Asp Ile Gly Tyr Ser Ser Val Thr Pro Ile Met Leu Arg Gly Phe Leu Arg Lys Gly Thr Phe Ile Pro Val Ala Gly

<212> PRT

<213> Mus musculus

```
90
Cys Val Ala Gln Leu Cys Ile Val Val Ala Phe Gly Thr Ser Glu Ser
                                                    110
                                105
Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
                                                125
                            120
Pro Leu Leu Tyr Ser Thr Gln Met Ser Ser Thr Val Cys Ile Leu Leu
                        135
                                            140
Val Gly Thr Ser Tyr Leu Gly Gly Trp Val Asn Ala Trp Ile Phe Thr
                    150
                                        155
Gly Cys Ser Leu Asn Leu Ser Phe Cys Gly Pro Asn Lys Ile Asn His
                                    170
Phe Phe Cys Asp Tyr Ser Pro Leu Leu Lys Leu Ser Cys Ser His Asp
            180
                                185
                                                    190
Phe Ser Phe Glu Val Ile Pro Ala Ile Ser Ser Gly Ser Ile Ile Val
                                                205
                            200
Val Thr Val Phe Ile Ile Ala Leu Ser Tyr Val Tyr Ile Leu Val Ser
                        215
                                            220
Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Phe Gly Thr Ile Thr
                                    250
                245
Phe Ile Tyr Val Met Pro Gln Ser Ser Tyr Ser Thr Asp Gln Asn Lys
                                265
                                                    270
            260
Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
        275
                            280
                                                285
Ile Tyr Ser Phe Arg Asn Lys Glu Val Lys Glu Ala Met Lys Lys Leu
                        295
                                            300
Ile Ala Lys Thr His Trp Trp Ser
                    310
<210> 2442
<211> 310
<212> PRT
<213> Mus musculus
<400> 2442
Met Glu Lys Ser Ser Asn Ile Thr Val Phe Ile Leu Leu Gly Leu Ser
                                    10
Gln Asn Lys Asn Thr Glu Ile Leu Cys Phe Val Leu Phe Phe Leu Phe
            20
                                25
Cys Tyr Ile Ala Ile Trp Met Gly Asn Val Leu Ile Met Val Ser Ile
                            40
Thr Cys Thr His Leu Val Glu Gln Pro Met Tyr Phe Phe Leu Asn Tyr
    50
                        55
Leu Ser Leu Ser Asp Leu Cys Tyr Thr Ser Thr Val Thr Pro Lys Leu
                    70
                                        75
Met Thr Asp Leu Leu Ala Glu Arg Lys Val Ile Ser Tyr Asn Asn Cys
                                    90
                85
Met Ile Gln Leu Phe Thr Thr His Leu Phe Gly Gly Ile Glu Ile Phe
            100
                                105
Ile Leu Thr Gly Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro
                                                 125
                            120
        115
Leu His Tyr Thr Ile Ile Met Ser Arg His Arg Cys Asn Leu Ile Ile
                                            140
    130
                        1.35
Met Thr Cys Cys Thr Gly Gly Phe Val His Ser Ala Ser Gln Leu Leu
```

Leu Thr Val Phe Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp His Tyr

```
Phe Cys Asp Val Tyr Pro Leu Leu Lys Leu Ala Cys Ser Asn Thr His
Ile Ile Gly Leu Leu Val Ile Ala Asn Ser Gly Leu Ile Ala Leu Val
                            200
                                                205
Thr Phe Val Val Leu Met Thr Ser Tyr Phe Phe Ile Leu Tyr Thr Ile
                                            220
                        215
Arg Ala Tyr Ser Ala Glu Ser Arg Ser Lys Ala Leu Ser Thr Cys Ser
                                        235
Ser His Leu Thr Val Val Val Leu Phe Phe Ala Pro Ala Leu Phe Ile
                                    250
Tyr Ile Arg Pro Ala Thr Thr Phe Pro Glu Asp Lys Val Phe Ala Leu
                                265
Phe Tyr Thr Ile Ile Ala Pro Met Phe Asn Pro Leu Ile Tyr Thr Leu
                            280
Arq Asn Thr Glu Met Lys Asn Ala Leu Arg Lys Val Trp Gly His Gln
                        295
                                            300
Gly Leu Leu Lys Gly Arg
<210> 2443
<211> 322
<212> PRT
<213> Mus musculus
<400> 2443
His Thr Asn Ser Thr Lys Ile Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Asp Arg Pro Glu Leu Gln Pro Leu Leu Phe Val Leu Phe Leu Phe Ile
                                25
Tyr Leu Val Thr Val Leu Gly Asn Met Gly Leu Met Ala Leu Ile Arg
Leu Asp Ser Arg Leu His Lys Pro Met Tyr Phe Phe Leu Ser Asn Leu
Ala Phe Val Asp Leu Cys Tyr Thr Ser Thr Ala Thr Pro Gln Met Leu
                    70
                                        75
Thr Asn Phe Leu Ser Glu Lys Lys Thr Ile Ser Phe Ile Gly Cys Phe
                                    90
                                                         95
Ile Gln Cys Tyr Leu Phe Ile Ala Leu Leu Thr Glu Phe Tyr Met
            100
                                105
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu
                            120
                                                125
Arg Tyr Ser Val Lys Met Ser Arg Arg Val Cys Ile Cys Leu Ala Met
```

135 140 Cys Pro Tyr Ile Tyr Gly Phe Ser Asp Gly Leu Phe Gln Ala Ile Leu 150 155 Thr Phe Ser Met Thr Phe Cys Lys Ser Asn Val Ile Asn His Phe Tyr 170 165 Cys Ala Asp Pro Pro Leu Ile Lys Leu Ser Cys Ser Asp Thr Tyr Lys 185 190 Lys Glu His Ala Met Leu Ile Ser Ala Ser Phe Asn Leu Ser Ser Ser 205 195 200 Leu Thr Ile Ile Leu Val Ser Tyr Ala Phe Ile Ile Ala Ala Ile Leu 220 215 Arg Ile Lys Ser Ala Glu Gly Arg His Lys Ala Phe Ser Thr Cys Gly 235 230 Ser His Met Met Ala Val Thr Leu Phe Tyr Gly Thr Leu Phe Cys Met 250 245 Tyr Val Arg Pro Pro Thr Asp Lys Thr Val Glu Glu Ser Lys Ile Ile

260 265 Ala Val Phe Tyr Thr Phe Val Ser Pro Leu Leu Asn Pro Leu Ile Tyr 280 285 Ser Leu Arg Asn Lys Asp Val Lys Gln Ala Leu Lys Thr Ile Leu Arg 295 300 Gln Asn Val Ile Arg Thr Ala Leu Met Arg Pro Pro Ser Asn Lys Leu 310 315 Gln Gln <210> 2444 <211> 312 <212> PRT <213> Mus musculus <400> 2444 Met Glu Ala Glu Asn His Thr Ala Ile Val His Phe Leu Leu Ile Gly 10 Leu Ser Glu Asp Pro Lys Ile Gln Ser Val Leu Phe Gly Leu Phe Leu 25 Ser Met Phe Leu Ile Thr Met Leu Gly Asn Phe Leu Ile Val Leu Val 40 Thr Ser Cys Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Cys 55 Asn Leu Ser Phe Val Asp Ile Cys Leu Thr Ser Thr Thr Ile Pro Lys 70 75 Met Leu Val Asn Ile Tyr Met His Thr Met Lys Ile Ser Tyr Thr Glu 90 Cys Leu Thr Gln Val Tyr Phe Phe Asn Asn Phe Leu Gly Met Asp Asn 100 105 Phe Leu Leu Thr Ile Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His 120 Pro Leu Asn Tyr Thr Val Ile Met Asn Pro Arg Ile Cys Gly Leu Leu 135 140 Val Leu Leu Ser Trp Ile Ile Met Phe Trp Val Ser Leu Ile His Met 155 150 Leu Leu Met Lys Gln Leu Asn Phe Ser Thr Ser Thr Glu Ile Pro His 170 Phe Phe Cys Glu Leu Thr Glu Leu Leu Arg Val Ala Arg Ser Asp Thr 185 190 His Ile Asn Asn Ile Phe Leu Tyr Leu Val Thr Ala Val Leu Gly Met 200 Phe Pro Val Ile Gly Ile Ala Phe Ser Tyr Phe His Ile Val Ser Ala 215 220 Leu Met Lys Met Ser Ser Ile Lys Asn Lys Tyr Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Cys Val Val Ser Met Phe Tyr Gly Thr Gly Phe 245 250 255 Val Val His Leu Ser Ser Ala Val Ala His Ser Ser Lys Arg Asn Thr 265 270 Ile Thr Ser Ile Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe 275 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Val Arg Leu 290 295 300 Leu Arg Arg Val Lys Phe Cys Pro

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<211> 305
<212> PRT
<213> Mus musculus
<400> 2445
Met Glu Glu Gly Asn Gln Thr Val Val Ser Glu Phe Ile Phe Gln Gly
Leu Cys Ala Ser Lys Glu Leu Gln Leu Phe Leu Leu Pro Phe Ser
                                25
Ile Leu Tyr Leu Met Ala Val Val Gly Asn Leu Phe Val Val Ile Leu
        35
                            40
Ile Ile Ile Asp His His Leu His Ser Pro Met Tyr Phe Leu Leu Ala
                                            60
Asn Leu Ser Phe Ile Asp Phe Cys Leu Ser Ser Val Thr Thr Pro Lys
                    70
                                        75
Leu Ile Thr Asp Leu Leu Lys Asp Asn Lys Thr Ile Ser Phe Gly Gly
                                    90
Cys Met Ser Gln Ile Leu Cys Val Tyr Phe Phe Gly Gly Ser Glu Met
                                105
                                                    110
Val Leu Leu Val Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
Pro Leu His Tyr Ser Ser Ile Met Gly Arg Gln Lys Cys Ile Trp Leu
Val Val Ile Ser Trp Thr Ile Gly Phe Ile His Ala Met Ser Gln Leu
                    150
                                        155
Ile Leu Ile Leu Asp Leu Pro Phe Cys Gly Pro Arg Val Ile Asp Ser
                                    170
                                                        175
                165
Phe Phe Cys Asp Ile Ser Leu Val Met Lys Leu Ala Cys Met Asn Thr
            180
                                185
                                                    190
Asp Thr Leu Glu Ile Leu Ile Asn Ala Asp Ser Gly Val Leu Ala Thr
                            200
                                                205
        195
Thr Cys Phe Ile Leu Leu Ile Ser Tyr Thr Asn Ile Leu Leu Thr
                                            220
Val Gln Leu His Ser Lys Asp Gly Ser Ser Lys Ala Leu Ser Thr Cys
                                        235
                    230
Thr Ser His Ile Ile Val Val Leu Leu Phe Phe Gly Pro Val Ile Phe
                                    250
Ile Tyr Leu Cys Pro Val Ser Ile Thr Trp Val Asp Asn Phe Leu Ala
Val Phe Tyr Ser Val Ile Thr Pro Leu Leu Asn Pro Ala Ile Tyr Thr
                            280
                                                285
Leu Arg Asn Lys Asp Ile Lys Asn Ala Ile Lys Lys Leu Ile Asn His
                        295
                                            300
Leu
305
<210> 2446
<211> 277
<212> PRT
<213> Mus musculus
<400> 2446
Leu Pro Phe Ser Ile Leu Tyr Leu Met Ala Val Val Gly Asn Leu Phe
1
                                    10
Val Val Ile Leu Ile Ile Asp His His Leu His Ser Pro Met Tyr
            20
Phe Leu Leu Ala Asn Leu Ser Phe Ile Asp Phe Cys Leu Ser Ser Val
```

```
40
Thr Thr Pro Lys Leu Thr Ile Asp Leu Leu Lys Glu Asn Lys Thr Ile
                        55
Ser Phe Val Gly Tyr Met Arg Gln Ile Val Cys Val His Phe Phe Ala
                    70
                                        75
Gly Gly Glu Met Val Leu Leu Val Thr Met Ala Tyr Asp Arg Tyr Val
                                    90
                                                         95
Ala Ile Cys Arg Pro Leu His Tyr Ser Ser Ile Met Asp Arg Gln Lys
                                105
Cys Ile Trp Leu Val Val Ile Ser Trp Ile Val Gly Phe Val His Ala
                            120
        115
Ile Ser Gln Met Leu Leu Ile Leu Asp Leu Pro Phe Cys Gly Pro Arg
                        135
Val Ile Asp Ser Phe Phe Cys Asp Ile Pro Leu Val Met Lys Leu Ala
                    150
Cys Met Asn Thr Asp Thr Leu Glu Ile Leu Ile Asn Ala Asp Ser Gly
                                    170
                165
Ile Leu Ala Thr Thr Cys Phe Ile Leu Leu Ile Ser Tyr Thr Tyr
                                185
                                                     190
Ile Leu Leu Thr Val Gln His Arg Ser Lys Asp Gly Ser Ser Lys Ala
                            200
Leu Ser Thr Cys Thr Ser His Ile Ile Val Val Leu Leu Phe Phe Gly
                                             220
Pro Ile Ile Phe Ile Tyr Leu Trp Pro Val Ser Ile Thr Trp Val Asp
                    230
                                        235
Lys Phe Leu Ala Val Phe Tyr Ser Val Ile Thr Pro Leu Leu Asn Pro
                                    250
Ala Ile Tyr Thr Leu Arg Asn Lys Asp Ile Lys Asn Ala Ile Lys Lys
Leu Ile Ser His Lys
        275
<210> 2447
<211> 293
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (13)...(19)
<223> Any amino acid
<400> 2447
Ser Trp His Lys Lys Val Lys Cys Leu Thr His His Xaa Xaa Xaa Xaa
Xaa Xaa Xaa Leu Leu Pro Phe Ser Val Leu Tyr Leu Met Thr Leu
                                2.5
Val Asp Asn Leu Phe Val Val Ile Leu Ile Ile Thr Asp His His Phe
                            40
Asn Ser Pro Met Tyr Phe Leu Ser Ala Asn Leu Ser Phe Val Asp Phe
                        55
Tyr Leu Ser Ser Val Asn Thr Pro Lys Leu Thr Ile Asp Leu Leu Lys
                    70
Glu Asn Lys Thr Ile Ser Phe Gly Gly Cys Met Ser Gln Ile Leu Cys
                85
                                    90
Val His Phe Phe Gly Gly Ser Glu Met Val Leu Leu Val Thr Met Ala
                                105
Tyr Asp Gln Tyr Val Ala Ile Cys Arg Pro Leu His Cys Ser Gly Ser
```

```
120
       115
Met Asp Arq Gln Lys Cys Ile Trp Leu Val Val Ile Ser Trp Ile Val
                        135
                                            140
Gly Phe Val His Ala Ile Ser Gln Leu Leu Leu Ile Leu Asp Leu Pro
                   150
                                        155
Phe Cys Gly Pro Arg Val Ile Asp Ser Phe Phe Cys Asn Ile Pro Leu
               165
                                    170
Val Met Lys Leu Ala Cys Met Asn Thr Asp Thr Leu Gly Ile Leu Ile
                                185
           180
Asn Ala Asp Ser Gly Ile Leu Ala Thr Tyr Ser Phe Thr Leu Leu
       195
                            200
Ile Ser Tyr Thr Tyr Ile Leu Leu Thr Val Gln His Arg Ser Lys Asp
                        215
Gly Ser Leu Lys Ala Leu Ser Thr Cys Thr Ser His Ile Ile Val Val
                    230
                                        235
225
Leu Leu Phe Phe Gly Pro Ile Ile Phe Ile Tyr Leu Trp Pro Val Asn
               245
                                    250
Ile Thr Trp Val Asp Lys Phe Leu Ala Val Phe Tyr Thr Val Ile Thr
                                265
Pro Leu Leu Asn Pro Ala Ile Tyr Thr Leu Arg Asn Lys Asp Ile Lys
                            280
Asn Ala Ile Lys Asn
   290
<210> 2448
<211> 313
<212> PRT
<213> Mus musculus
<400> 2448
Leu His Gly Glu Thr Glu Pro Ser Pro Val Val Lys Asp Phe Ile Leu
                                    10
Ile Gly Ile Thr Asn Arg Pro Glu Leu Lys Gly Pro Leu Phe Gly Leu
                                2.5
Phe Leu Ile Ile Tyr Leu Ile Ser Leu Met Gly Asn Met Gly Met Ile
                            40
Ile Leu Thr Ile Val Asp Pro Arg Leu Gln Thr Pro Met Tyr Phe Phe
                        55
Leu Lys His Leu Ala Val Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly
                                        75
                    70
Pro Lys Met Leu Glu Asn Phe Val Val Asn Gln Asn Thr Ile Ser Tyr
                                    90
                8.5
Tyr Leu Cys Ala Leu Gln Leu Ala Cys Phe Leu Leu Phe Ile Thr Cys
                                105
            100
Glu Leu Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile
                                                125
       115
                            120
Cys Asn Pro Leu Leu Tyr Asn Val Ile Met Ser Lys Lys Cys Trp
                        135
                                            140
Leu Leu Ile Val Ile Ala Tyr Leu Tyr Gly Leu Phe Leu Ser Leu Ile
                    150
                                        155
Ile Thr Leu Lys Met Phe Arg Leu Ser Phe Cys Ser Tyr Asn Ile Ile
                                    170
                165
Asn His Phe Phe Cys Asp Cys Ile Pro Leu Ile Pro Leu Cys Ser
                                185
                                                    190
Asn Thr His Glu Ile Gln Leu Ile Ile Leu Val Phe Ala Ile Phe Asp
```

200 Ser Ile Cys Ser Leu Leu Val Val Leu Val Ser Tyr Leu Leu Ile Leu

220

```
Ile Thr Ile Leu Arg Met Asn Ser Thr Glu Gly Arg His Lys Ala Phe
                    230
                                        235
Ala Asn Cys Gly Ser His Ile Thr Val Val Thr Val Phe Tyr Gly Thr
                                                        255
                                    250
Leu Ile Ser Met Tyr Leu Gln Pro Asn Tyr Ser His Ser Phe Asp Thr
                                265
Asp Lys Leu Ala Ser Ile Phe Tyr Thr Met Ile Ile Pro Met Leu Asn
                            280
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asn Ala Gly Gln
                        295
                                            300
Arg Ile Trp Lys Lys Leu Cys Lys Ile
                    310
<210> 2449
<211> 316
<212> PRT
<213> Mus musculus
<400> 2449
Met Asp Leu Lys Asn Lys Thr Thr Ser Ser Phe Ile Leu Leu Gly Leu
Phe Pro Ser Cys Arg Tyr Pro Asn Leu Leu Ile Ser Phe Ile Leu Leu
Ile Tyr Thr Leu Ala Ser Ala Gly Asn Ser Leu Leu Ile Leu Leu Ile
                            40
Trp Leu Asp Pro Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser Gln
Leu Ser Val Ile Asp Leu Ala Tyr Ile Ser Cys Thr Val Pro Lys Ala
                                        75
                    70
Ala Ile Asn Tyr Phe Thr Gly Arg Arg Asn Ile Ser Phe Phe Ala Cys
                8.5
Ala Thr Gln Met Phe Ser Phe Leu Thr Leu Gly Leu Ala Glu Cys Ile
                                105
Leu Leu Thr Leu Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asn Pro
                            120
Leu Arg Tyr Thr Ile Leu Met Ser Pro Lys Val Cys Leu Met Met Ala
                        135
Ala Ser Thr Trp Ile Gly Ala Val Thr Ala Ala Leu Val His Thr Val
                    150
Tyr Pro Met Asn Phe Pro Ile Cys Gly Ser Arg Glu Ile Asn His Tyr
                                    170
                165
Phe Cys Glu Met Pro Ala Ile Leu Arg Met Ser Cys Val Asp Thr Ser
                                                    190
                                185
Val Tyr Glu Met Val Lys Phe Val Ser Thr Ile Ile Phe Leu Leu Thr
                            200
Pro Phe Thr Leu Ile Leu Thr Ser Tyr Thr Leu Ile Phe Leu Thr Val
                                            220
                        215
Leu Arg Met Asn Ser Pro Lys Gly Arg Asn Lys Ala Leu Ala Thr Cys
                                        235
                    230
Ser Ser His Leu Thr Val Val Ser Leu Tyr Phe Gly Gln Ala Ile Phe
                                    250
Ile Tyr Met Thr Pro Thr Ser Ser His Thr Pro Asp Gln Asp Gln Val
                                265
                                                    270
Gly Ala Val Leu Gly Thr Ile Val Thr Pro Met Leu Asn Pro Leu Ile
                            280
                                                285
Tyr Ser Leu Arg Asn Lys Glu Val Ile Gly Ala Leu Gln Lys Cys Thr
                        295
```

Gly Arg Cys Cys Ser Arg Asp Arg Val Gly Ser Leu

305 310 315

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<211> 315
<212> PRT
<213> Mus musculus
<400> 2450
Met Gly Ala Thr Asn Asp Ser Thr Phe Ser His Phe Ile Leu Thr Gly
                                    10
1
Phe Ser Asp Arg Pro Glu Leu Glu Arg Val Leu Phe Ala Ile Leu Leu
                                25
Pro Ala Tyr Leu Leu Thr Leu Leu Gly Asn Ser Thr Ile Ile Leu Val
       35
                                                45
                            40
Ser Arg Leu Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                       55
                                            60
His Leu Ser Phe Leu Asp Leu Ser Phe Thr Ser Ser Ser Ile Pro Gln
                   70
                                        75
Leu Leu Tyr Asn Leu Ser Gly Pro Asp Lys Thr Ile Ser Tyr Val Gly
                                   90
              8.5
Cys Ala Leu Gln Leu Val Leu Phe Leu Gly Leu Gly Gly Val Glu Cys
                                105
                                                    110
           100
Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Lys
                                               125
       115
                            120
Pro Leu His Tyr Met Val Ile Met Ser Pro Arg Leu Cys Val Gly Leu
                       135
                                            140
Val Ser Val Ala Trp Ser Cys Gly Val Ala Asn Ser Leu Ala Met Ser
                   150
                                        155
Pro Ala Thr Leu Ser Leu Pro Arg Cys Gly His His Arg Val Asp His
               165
                                    170
                                                        175
Phe Leu Cys Glu Met Pro Ala Leu Ile Arg Met Ala Cys Val Asn Thr
           180
                                185
                                                    190
Ala Val Val Glu Gly Ile Ala Phe Ile Leu Ala Ile Gly Ile Val Leu
                            200
                                                205
Ser Pro Leu Val Phe Ile Leu Val Ser Tyr Gly Tyr Ile Val Arg Ala
                       215
                                            220
Val Leu Arg Ile Ser Ser Ala Ala Gly Arg Gln Lys Ala Phe Asn Thr
                   230
                                        235
Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Asn Ile Ile
                245
                                    250
Tyr Met Tyr Met Gln Pro Gly Asn Ser Ser Gln Asp Gln Gly Lys
           260
                                265
Phe Leu Thr Leu Phe Tyr Asn Ile Val Thr Pro Leu Leu Asn Pro Leu
                            280
                                                285
Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Arg Arg Leu
                       295
                                            300
Leu Leu Gly Ser Arg Glu Thr Gly Lys Val Arg
                    310
<210> 2451
<211> 313
<212> PRT
<213> Mus musculus
<400> 2451
Met Glu Gly Ala Asn Leu Ser Gly Val Ser Glu Phe Leu Leu Gly
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Leu Ser Gln Asp Pro Arg Gln Gln Leu Leu Phe Ser Ala Phe Leu
Ser Met Tyr Leu Leu Thr Gly Leu Gly Asn Leu Leu Ile Ile Leu Ala
Ile Ala Ala Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
Asn Leu Ala Phe Val Asp Val Cys Phe Thr Ser Thr Thr Ile Pro Lys
                    70
Met Leu Ala Asn His Val Ser Gly His Lys Gly Ile Ser Tyr Ser Gly
                                    90
Cys Leu Thr Gln Met Phe Phe Phe Ile Trp Phe Ala Gly Ile Asp Ser
           100
                                105
Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
                            120
Pro Leu His Tyr Thr Thr Ser Ile Thr Pro Arg Leu Cys Gly Phe Leu
                        135
Val Thr Ala Ser Trp Ala Ser Ala Phe Ala Asn Ala Leu Thr His Thr
                   150
                                        155
Val Leu Leu Thr Arg Leu Leu Phe Cys Gly His Asn Gln Val Pro His
               165
                                    170
Phe Phe Cys Asp Leu Ser Pro Leu Leu Lys Leu Ala Cys Leu Asp Thr
           180
                                185
Ser Leu Asn Asp Ile Met Val Tyr Thr Val Gly Ala Leu Pro Ile Ile
                            200
       195
Thr Pro Phe Val Gly Ile Leu Thr Ser Tyr Thr Arg Ile Phe Thr Ala
                                            220
                        215
Val Leu Arg Ile Pro Ser Thr Gly Gly Lys Trp Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Leu Ile
                245
                                    250
Gly Val Tyr Phe Ser Pro Thr Ser Ser His Thr Ala Gln Lys Asp Thr
                                265
                                                    270
Ala Ala Ala Val Met Tyr Thr Val Val Thr Pro Met Met Asn Pro Phe
                           280
Ile Tyr Thr Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Met Thr Phe
                       295
Val Arg Arg Thr Ala Val Leu Val Arg
<210> 2452
<211> 326
<212> PRT
<213> Mus musculus
<400> 2452
Met Phe Ser Asp Asp Pro Val Gln Gln Leu Ser Met Ala Met Trp Leu
```

```
Ile Gly Leu Phe Val Cys Leu Val Gly Ser Glu Gly Leu Leu Gly
                            120
Leu Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser His Pro Leu Arg Tyr
                        135
                                            140
Pro Val Leu Met Asn Gln Lys Val Cys Leu Gln Ile Ile Gly Ser Ser
                   150
                                        155
Trp Ala Phe Gly Ile Ala Asp Gly Leu Val Gln Met Val Val Met
                                    170
               165
Thr Phe Pro Tyr Cys Ser Leu Arg Glu Val Asp His Phe Phe Cys Glu
           180
                                185
                                                    190
Met Leu Ser Leu Leu Lys Leu Ala Cys Val Asp Thr Ser Leu Phe Glu
                            200
       195
Lys Ile Val Phe Phe Cys Cys Ile Phe Met Leu Leu Phe Pro Phe Ser
                        215
                                            220
Ile Ile Val Ala Ser Tyr Thr Arg Ile Leu Gly Thr Val Leu His Met
                   230
                                        235
His Ser Ala Lys Ser Gln Lys Lys Ala Leu Ala Thr Cys Ser Ser His
               245
                                    250
Met Ala Ala Val Ser Phe Phe Tyr Gly Ala Ala Met Phe Ile Tyr Leu
            260
                                265
Arg Pro Arg Gln Tyr Arg Thr Pro Ser Gln Asp Lys Met Val Ser Ile
                            280
Phe Tyr Thr Val Leu Thr Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu
                        295
Arg Asn Arg Asp Val Ile Gly Ala Leu Gln Lys Gly Leu Asp Arg Cys
                   310
                                        315
Arg Val Gly Ser Gln Pro
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 2453

Met Leu Met Ala Met Glu Asn Asp Ser Ser Val Thr Glu Phe Val Phe 10 Met Gly Leu Thr Glu Gln Pro Glu Leu Gln Leu Pro Leu Phe Phe Val 20 25 Phe Leu Leu Asn Tyr Thr Ala Thr Val Met Gly Asn Leu Ser Leu Val 40 Val Leu Ile Cys Leu Asn Ser His Leu His Asn Pro Met Tyr Phe Phe 55 Leu Phe Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Phe Val Cys Thr 70 75 Pro Lys Met Leu Met Gly Phe Val Ser Glu Lys Ser Ile Ile Ser Tyr 85 90 Thr Gly Cys Met Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Asn Ser 100 105 110 Glu Cys Tyr Val Leu Thr Ala Met Val Tyr Asp Arg Tyr Val Ala Ile 115 120 125 Cys Lys Pro Leu Val Tyr Ala Ile Leu Met Ser Pro Arg Met Cys Ser 130 135 140 Leu Leu Met Ile Gly Ser Tyr Leu Met Gly Phe Ala Ser Ala Met Ala 150 155 His Thr Gly Cys Met Ile Arg Leu Lys Phe Cys Asp Leu Asn Ile Ile

```
Asn His Tyr Met Cys Glu Ile Phe Pro Leu Gln Leu Ser Cys Ser
Ser Thr Tyr Ala Asn Glu Leu Val Ser Ser Leu Ile Ala Cys Ile Val
        195
                            200
Val Ile Val Ser Gly Leu Val Ile Leu Met Ser Tyr Ala Ser Ile Leu
                        215
                                            220
Leu Asn Val Val Gln Met Ser Ser Ala Thr Gly Trp Ser Lys Ala Met
                    230
                                        235
Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly Ser
                245
                                    250
Gly Leu Leu Thr Tyr Val Lys Pro Ala Ser Ala Glu Ser Val Asp Gln
                                265
Gly Lys Phe Phe Ser Val Phe Tyr Thr Leu Met Val Pro Met Leu Asn
                           280
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Ala Lys
                       295
Arg Thr Met Lys Arg Ile Thr Ile
                    310
<210> 2454
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<211> 309

<212> PRT

<213> Mus musculus

<400> 2454

Met Glu Leu Lys Asn Asp Thr Gln Ile Ser Lys Phe Ile Leu Leu Gly 10 Ile Ser Glu Asp Pro Leu Trp Gln Pro Phe Leu Phe Gly Leu Phe Leu 20 25 Phe Met Tyr Leu Val Thr Leu Leu Gly Asn Leu Leu Ile Ile Ala 4.0 Thr Ile Thr Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 60 55 Asn Leu Ser Phe Ala Asp Ile Cys Phe Thr Ser Ala Ser Ile Pro Lys 70 75 Met Leu Val Asn Ile Gln Thr Lys Asn Lys Val Ile Thr Tyr Glu Gly 90 8.5 Cys Ile Ser Gln Val Phe Phe Phe Ile Leu Phe Gly Val Leu Asp Asn 105 100 Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 Pro Leu His Tyr Met Val Ile Met Asn Cys Arg Leu Cys Gly Phe Leu 135 140 Val Leu Gly Ser Trp Val Thr Thr Ala Leu Asn Ser Leu Leu Gln Ser 150 155 Ser Met Ala Leu Arg Leu Ser Phe Cys Thr Asp Leu Lys Ile Pro His 165 170 175 Phe Val Cys Glu Leu Asn Gln Leu Val Leu Leu Ala Cys Asn Asp Thr 185 Phe Pro Asn Asp Met Val Met Tyr Phe Ala Ala Ile Leu Leu Gly Gly 200 Gly Pro Leu Ala Gly Ile Leu Tyr Ser Tyr Ser Lys Ile Val Ser Ser 215 220 Ile Arg Ala Ile Ser Ser Gln Gly Lys Tyr Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr Ser Thr Leu Leu Gly Val Tyr Leu Ser Ser Ser Phe Thr Gln Asn Ser His Ser Thr Ala

260 265 Arg Ala Ser Val Met Tyr Ser Val Val Thr Pro Met Leu Asn Pro Phe 275 280 Ile Tyr Ser Leu Arg Asn Lys Asp Leu Met Gly Ala Leu Arg Arg Leu 295 Leu Arg Arg Lys Ser 305 <210> 2455 <211> 315 <212> PRT <213> Mus musculus <400> 2455 Met Trp Val Val Leu Gly Gln Asn Gln Ser Trp Val Ser Glu Phe Ile 10 Leu Ile Gly Phe Ser Ser Asp Pro Thr Thr Asn Ser Ile Leu Phe Ile 20 25 Val Phe Leu Leu Ile Tyr Leu Ser Ser Val Leu Gly Asn Gly Leu Ile 40 45 Ile Met Leu Val Cys Leu Asp Thr Gln Leu His Thr Pro Met Tyr Phe 55 Phe Leu Ser Thr Leu Ser Leu Leu Asp Met Ser Tyr Val Thr Thr 70 75 Met Pro Gln Met Leu Val His Leu Leu Ala His Ser Gln Thr Ile Ser 90 85 Phe Val Gly Cys Trp Leu Gln Met Phe Val Phe Ser Ala Leu Gly Ile 105 100 Thr Glu Cys Thr Phe Phe Val Val Met Ala Tyr Asp Arg Tyr Val Ala 120 125 115 Ile Cys Tyr Pro Leu Arg Tyr Thr Val Ile Leu Asn Trp Gly Leu Cys 130 135 140 Ile His Leu Thr Ala Gly Ser Trp Val Cys Gly Leu Phe Ser Ser Leu 145 150 155 Leu His Thr Phe Phe Thr Met Ser Leu Pro Tyr Cys Gly Pro Asn Arg 170 165 Val Asn His Tyr Phe Cys Glu Gly Pro Ser Val Arg Ser Leu Ala Cys 180 185 Met Asp Thr His Val Ile Glu Met Val Asp Phe Val Leu Ser Val Phe 195 200 Val Ile Val Ile Pro Ile Ser Leu Ile Val Ala Ser Tyr Ile Gly Ile 215 Ala Lys Ala Ile Leu Lys Ile Lys Ser Thr Glu Gly Arg Cys Lys Ala 230 235 Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Thr Phe Phe Tyr Ala 245 250 255 Pro Ala Thr Tyr Ile Tyr Met Arg Pro Asn Ser Ser Tyr Ser Pro Glu 260 265 Arg Asp Lys Gln Ile Ser Leu Phe Tyr Asn Thr Phe Thr Ala Leu Leu 275 280 Asn Pro Val Val Tyr Ser Leu Arg Asn Lys Asp Ile Lys Arg Ala Phe 295 Phe Lys Val Met Gly His Gly Arg Met Asp Tyr 310

```
Ser Ile Val Asp Met Cys Tyr Val Ser Val Thr Val Pro Asn Ala Cys
                    70
                                        75
                                                             80
Phe Asn Ser Leu Thr Gly Gln Arg Asn Ile Ser Val Thr Gly Cys Ala
                                    90
                                                         95
Ala Gln Ile Phe Phe Val Phe Phe Cys Ala Cys Val Glu Met Phe Phe
            100
                                105
Leu Thr Ile Met Ala Gln Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                 125
Leu Tyr Pro Val Ile Met Asn His Gln Phe Cys Val Gln Met Thr Leu
                        135
                                            140
Ala Ser Leu His Ser Ser Leu Ile Ile Ala Ser Val His Thr Phe Lys
                    150
                                        155
Thr Phe Gln Leu Ser Phe Cys His Ser Asn Val Val Pro Gln Phe Phe
                                    170
                165
Cys Asp Ile Pro Ser Leu Leu Lys Leu Ser Cys Ser Asp Thr Phe Asn
                                185
                                                     190
            180
Asn Lys Leu Leu Met Leu Ile Ser Ala Ile Ile Ile Gly Cys Ser Cys
                            200
                                                 205
       195
Phe Thr Phe Ile Ala Val Ser Tyr Phe Arg Ile Leu Ser Thr Val Leu
                        215
                                             220
Lys Val Pro Val Lys Gly Glu Arg Gly Lys Ala Phe Ser Thr Cys Val
                    230
                                        235
Pro His Ile Val Val Val Ser Val Phe Leu Ser Ser Ser Thr Tyr Val
                                    250
                                                         255
Tyr Leu Arg Pro Pro Val Pro Thr Leu Glu Val Lys Glu Met Ala
                                265
                                                     270
Leu Ser Val Ser Tyr Thr Ile Val Pro Pro Phe Leu Asn Pro Ile Ile
Tyr Ser Leu Arg Asn Arg Gln Ile Lys Glu Ala Val Lys Lys Val Ile
                                             300
Leu Arg Ile Ser Leu Val
<210> 2458
<211> 313
<212> PRT
<213> Mus musculus
<400> 2458
Phe Phe Arg Asn Thr Glu Tyr Lys Asn Gln Thr Phe Ala Ser Glu Phe
                                    10
Ile Leu Leu Gly Leu Thr Asp Asp Pro Glu Leu Gln Leu Ile Leu Phe
Gly Ile Phe Leu Phe Met Tyr Leu Val Thr Val Leu Gly Asn Leu Ile
                            40
Ile Ile Cys Ala Val Ser Leu His Pro Lys Leu His Thr Pro Met Tyr
                        55
Phe Phe Leu Ser Asn Leu Ser Phe Thr Asp Ile Cys Phe Ile Thr Ser
                    70
                                        75
Thr Val Pro Lys Met Leu Val Asn Ile Gln Lys Gln Asn Asn Ala Ile
                                    90
                85
Ser Tyr Pro Asp Cys Leu Thr Gln Met Tyr Phe Val Ile Phe Leu Gly
            100
                                105
                                                     110
Gly Met Glu Asn Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val
                            120
                                                125
```

Ala Ile Cys His Pro Leu Arg Tyr Thr Val Ile Met Asn Pro Ser Ile

140

```
Cys Ile Leu Leu Thr Leu Leu Ser Val Leu Ser Ser Thr Ile Asp Ala
                    150
                                        155
Leu Leu His Ser Leu Leu Val Leu Arg Leu Ser Phe Cys Thr Tyr Leu
                                                         175
                165
                                    170
Lys Ile Pro His Phe Phe Cys Glu Leu Ala His Ile Ile Lys Leu Ser
                                185
                                                     190
Cys Ser Asp Thr Leu Ile Asn Asn Ile Val Val Tyr Leu Ala Thr Phe
        195
                            200
Ile Phe Gly Gly Leu Pro Phe Trp Gly Ile Ile Leu Ser Tyr Val Gln
                        215
Ile Val Tyr Ser Val Leu Lys Lys Pro Ser Val Arg Gly Ser Tyr Lys
                    230
                                        235
                                                             240
Ala Leu Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr
                245
                                     250
Gly Ser Val Ile Gly Val Tyr Ile Ser Phe Ala Val Thr Asp Ser Ser
            260
                                265
                                                     270
Arg Lys Ala Ala Val Ala Ser Val Leu Tyr Thr Val Val Pro Gln Met
        275
                            280
Leu Asn Pro Phe Val Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Ala
                        295
                                            300
Val Arg Lys Leu Cys Gly Gly Ile Leu
                    310
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<210> 2459 <211> 309 <212> PRT

<213> Mus musculus

<400> 2459

Met Ala Asp Ile His Asn Val Thr Glu Phe Phe Phe Leu Gly Leu Ser 1.0 Ser Asn Gln Glu Val Gln Arg Val Cys Phe Val Ile Phe Leu Phe Leu Tyr Met Ala Ile Val Leu Gly Asn Leu Leu Met Val Val Ile Val Ala Val Ser Arg Asn Leu Gly Ser Pro Met Tyr Phe Phe Leu Ser Ser Leu Ser Phe Val Glu Ile Cys Tyr Ser Ser Thr Thr Ala Pro Lys Leu Ile Val Asp Leu Leu Ala Glu Lys Lys Ser Ile Ser Val Trp Gly Cys Met Ala Gln Leu Phe Phe Met His Phe Phe Gly Gly Ile Glu Met Phe Leu Leu Thr Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Thr Ser Ile Met Asn Arg Gln Val Cys Thr Val Leu Val Gly Met Ala Trp Met Gly Gly Phe Val His Ser Leu Ala Gln Val Leu Leu Ile Phe Arg Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Tyr Phe Cys Asp Val Leu Pro Val Leu Lys Leu Val Cys Ser Asp Thr Phe Leu Ile Gly Leu Leu Ile Val Val Asn Gly Gly Thr Leu Ser Val Ile Ser Phe Val Val Leu Leu Ser Ser Tyr Ala Val Ile Leu Phe His Leu Arg Thr Gln Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser

```
230
                                        235
225
His Val Thr Val Val Ile Phe Phe Ala Pro Cys Val Phe Ile Tyr
                                    250
                245
Leu Arg Pro Thr Ala Thr Leu Pro Ile Asp Lys Met Val Thr Val Phe
                                265
                                                    270
Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Ile Ile Tyr Ser Leu Arg
                            280
                                                 285
Asn Ala Glu Val Lys Lys Ala Ile Lys Ile Leu Trp Thr Arg Ala Thr
                                            300
Lys Val Asp Lys Lys
305
<210> 2460
<211> 298
<212> PRT
<213> Mus musculus
<400> 2460
Leu Gly Phe Ser Ser Val Pro Thr Thr Asn Ser Ile Leu Phe Ile Val
                 5
                                    10
Phe Leu Leu Val Tyr Leu Ser Ser Val Leu Gly Asn Gly Leu Ile Ile
                                25
                                                     30
Met Leu Val Cys Leu Asp Thr Gln Leu His Thr Pro Met Tyr Phe Phe
                            40
Leu Cys Thr Leu Ser Leu Leu Asp Met Ser Tyr Val Thr Thr Met
                        55
Pro Gln Met Leu Val His Leu Leu Ala His Ser Gln Thr Ile Ser Phe
                    70
                                        75
Val Gly Cys Trp Leu Gln Met Tyr Met Phe Ser Ala Leu Gly Ile Ala
                                    90
Glu Ser Ile Leu Phe Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile
                                                     110
            100
                                105
Cys Tyr Pro Leu Arg Tyr Thr Val Ile Leu Asn Trp Gly Leu Cys Ile
                                                 125
Arg Leu Ala Ala Gly Thr Trp Ile Tyr Gly Ser Phe Ser Ser Leu Leu
                        135
                                            140
His Thr Phe Phe Thr Met Ser Leu Pro Tyr Cys Gly Pro Asn Arg Val
                                        155
                    150
Asp His Tyr Phe Cys Glu Gly Pro Ser Val Arg Ser Leu Ala Cys Met
                                    170
                                                         175
Asp Thr His Leu Ile Glu Met Val Asp Leu Val Leu Ser Val Phe Val
                                185
                                                     190
Val Val Thr Pro Ile Ser Leu Ile Val Ala Ser Tyr Ile His Ile Thr
                            200
                                                 205
Lys Ala Ile Leu Lys Ile Lys Ser Thr Gln Ala Arg Cys Lys Ser Phe
                        215
                                            220
Ser Thr Cys Ala Ser His Leu Thr Val Val Thr Phe Phe Tyr Ile Pro
                    230
                                         235
Ala Ile Tyr Ile Tyr Ile Arg Pro Asn Ser Ser Tyr Ser Pro Glu Arg
                245
                                    250
Asp Lys Gln Ile Ser Leu Phe Tyr Asn Val Phe Thr Ala Leu Leu Asn
                                265
                                                     270
Pro Val Val Tyr Ser Leu Arg Asn Lys Asp Ile Lys Arg Ala Phe Leu
                            280
                                                 285
Lys Val Met Gly Leu Gly Arg Met Asp Trp
```

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<211> 312
<212> PRT
<213> Mus musculus
<400> 2461
Val Arg Arg Glu Asn Gln Ser Thr Val Phe Glu Phe Leu Leu Gly
                                    10
Leu Pro Ile Arg Pro Glu His Gln Asn Val Phe Phe Thr Met Phe Leu
           20
                                25
Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu
                            40
Ile Arg Leu Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
His Leu Ala Phe Ser Asp Ile Ser Leu Ser Ser Ile Thr Val Pro Lys
                    70
                                        75
Met Leu Met Asn Ile Gln Ala Gln His His Ser Ile Ser Tyr Lys Gly
                85
                                    90
Cys Ile Ser Gln Met Tyr Phe Phe Ile Leu Phe Val Cys Leu Asp Asn
            100
                                105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu His Tyr Ile Thr Val Met Arg Glu Glu Leu Cys Val Cys Leu
                        135
                                            140
Val Ala Gly Ser Trp Phe Phe Ser Cys Val His Ala Leu Leu His Thr
                    150
                                        155
Leu Leu Ile Gln Leu Ser Phe Cys Ala Ser Asn Thr Val Pro Asn
                                    170
               165
                                                        175
Phe Phe Cys Asp Leu Thr Ala Leu Leu Lys Leu Ser Cys Ser Asp Ile
           180
                                185
                                                    190
Ser Leu Asn Lys Leu Val Ile Phe Thr Glu Gly Gly Leu Leu Phe Ile
       195
                            200
                                                205
Leu Pro Leu Ser Ser Ile Met Gly Ser Tyr Ile Leu Ile Gly Arg Thr
                        215
                                            220
Ala Leu Lys Ala Pro Ser Thr Lys Arg Phe Ile Lys Thr Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Leu Val Val Ser Leu Tyr Tyr Gly Thr Leu Ala
                245
                                    250
Gly Glu Tyr Phe Phe Ser Ser Phe Gln Asn Ser Ser Asp Lys Asp Ile
                                265
                                                    270
Val Ala Ser Val Ile Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Ser Asp Ile Lys Gln Ala Leu Glu Ile Val
                        295
Val Thr Lys Ile Asn Cys Phe Lys
<210> 2462
<211> 317
<212> PRT
<213> Mus musculus
<400> 2462
Met Ser Gly Trp Ser Asn Gly Thr Tyr Asn Glu Ser Tyr Thr Ser Phe
Leu Leu Met Gly Phe Pro Gly Met Gln Glu Ala Arg Ala Leu Leu Val
Leu Pro Phe Leu Ser Leu Tyr Leu Val Ile Leu Phe Thr Asn Ala Leu
```

```
40
Val Ile His Thr Val Ala Ser Gln Arg Ser Leu His Gln Pro Met Tyr
                        55
Leu Leu Ile Ala Leu Leu Ala Val Asn Ile Cys Ala Ala Thr Thr
                    70
                                        75
Val Val Pro Pro Met Leu Phe Ser Phe Ser Thr Arg Phe Asn Arg Ile
                                    90
Ser Leu Pro Arg Cys Leu Gly Gln Met Phe Cys Ile Tyr Phe Leu Ile
Val Phe Asp Cys Asn Ile Leu Leu Val Met Ala Leu Asp Arg Tyr Val
                            120
Ala Ile Cys Tyr Pro Leu Arg Tyr Pro Glu Ile Val Thr Gly Gln Leu
                        135
Leu Ala Gly Leu Val Val Leu Ala Val Thr Arg Ser Thr Ser Ile Val
                    150
                                        155
Ala Pro Val Val Leu Ala Ser Arg Val Arg Phe Cys Arg Ser Asp
                                    170
                                                        175
Val Ile Arg His Phe Ala Cys Glu His Met Ala Leu Met Lys Leu Ser
                                185
                                                    190
Cys Gly Asp Ile Ser Leu Asn Lys Thr Val Gly Leu Thr Val Arg Ile
        195
                            200
Phe Asn Arg Val Leu Asp Met Leu Leu Gly Ala Ser Tyr Ser Arg
                        215
Ile Ile His Ala Ala Phe Arg Ile Ser Ser Gly Gly Ala Arg Ser Lys
                    230
                                        235
                                                            240
Ala Leu Asn Thr Cys Gly Ser His Leu Leu Val Ile Phe Thr Val Tyr
                                    250
Ser Ser Thr Met Ser Ser Ser Ile Val Tyr Arg Val Ala Arg Thr Ala
                                                    270
Ser Gln Asp Val His Asn Leu Leu Ser Ala Phe Tyr Leu Leu Pro
                            280
Cys Leu Val Asn Pro Ile Ile Tyr Gly Ala Arg Thr Lys Glu Ile Arg
                        295
Gln His Leu Val Ala Leu Phe Gln Arg Thr Gln Gln Gln
<210> 2463
<211> 309
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<212> PRT

<213> Mus musculus

<400> 2463

Val Leu Leu Asn Gln Thr Leu Val Thr Glu Phe Leu Leu Gly Val 1 10 Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Thr Val Leu Ala Met Tyr Phe Val Asn Val Ala Gly Asn Gly Ala Ile Leu Leu Ile Val 40 Ile Ser Asp Pro Arq Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn 55 Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val Thr Val Pro Lys Ile 70 75 Leu Asp Asn Phe Phe Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys 90 85 Ile Thr Gln Leu Tyr Phe Phe His Leu Leu Gly Ser Thr Glu Ala Leu 100 105 Leu Leu Ala Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro 120 115

```
Leu His Tyr Pro Ser Ile Met Asn Arg Gln Val Cys Ile Gln Val Ala
                        135
Ile Ser Ile Trp Ala Ile Pro Phe Val His Ala Leu Val His Ser Ile
                    150
                                        155
Leu Thr Ser Gln Leu Asn Phe Cys Gly Ser Asn Gln Ile His His Phe
                                    170
Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu
                                185
Leu Asn Arg Trp Leu Leu Asn Thr Phe Thr Gly Thr Phe Ala Ile Gly
        195
                            200
Leu Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Ile Thr Tyr Leu
                        215
                                            220
Phe Leu Lys Thr Arg Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr
                    230
                                        235
Cys Ala Ser His Phe Met Val Val Met Ile Phe Tyr Ala Pro Val Leu
                245
                                    250
Phe Ile Tyr Ile Asn Pro Asp Ser Gly Ser Ser Leu Glu Lys Asp Arg
            260
                                265
                                                     270
Ile Ile Ala Val Met Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
        275
                            280
Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Gly Ala Leu Asn Arg Lys
   290
                        295
Leu Arg Ile Leu Leu
305
```

<210> 2464 <211> 312 <212> PRT

<213> Mus musculus

<400> 2464

Met Ile Leu Val Asn Lys Ser His Pro Glu Glu Phe Ile Leu Leu Gly 1 10 Phe Ala Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe Ile Ile Leu Leu 20 Val Thr Tyr Pro Thr Ala Met Ile Gly Asn Ile Ala Ile Ile Leu Met 35 40 Ser Ile Leu Asp Pro Cys Leu His Ser Pro Met Tyr Phe Phe Leu Thr 55 60 Asn Leu Ser Phe Leu Asp Met Cys Tyr Thr Thr Ser Ile Val Pro Gln 70 Met Leu Ile Asn Leu Trp Gly Ser Thr Lys Thr Ile Ser Tyr Leu Arg 8.5 90 Cys Val Val Gln Leu Tyr Phe Phe His Thr Met Gly Gly Thr Glu Cys 100 105 Val Leu Leu Ala Leu Met Ser Phe Asp Arg Tyr Val Ala Ile Cys Lys 115 120 Pro Leu His Tyr Thr Leu Ile Met Asn Arg Arg Asn Cys Leu Leu Leu 130 135 Val Ser Thr Val Trp Leu Thr Gly Ile Ser Tyr Ala Val Ser Glu Ala 150 155 Thr Val Thr Leu Gln Leu Pro Leu Cys Gly His Asn Lys Met Asp His 170 165 175 Leu Val Cys Glu Ile Pro Ile Leu Ile Lys Thr Ala Cys Gly Glu Lys 180 185 190 Glu Thr Asn Glu Leu Ala Leu Ser Val Ile Cys Ile Phe Leu Leu Ala 200 Val Pro Leu Cys Leu Ile Leu Ala Ser Tyr Ala Ser Ile Gly His Ala

```
215
                                             220
Val Phe Lys Ile Lys Ser Ile Glu Gly Arg Lys Lys Ala Phe Gly Thr
                    230
                                         235
Cys Ser Ser His Leu Ile Val Val Leu Leu Phe Tyr Gly Pro Gly Ile
                245
                                    250
Ser Met Tyr Leu Gln Pro Pro Ser Ser Ile Thr Lys Asp Gln Pro Lys
Phe Met Ala Leu Phe Tyr Gly Val Val Thr Pro Thr Leu Asn Pro Phe
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Gly Asn Leu
                                             300
                        295
Phe Arg Asn Ile Phe Ile Pro Lys
                    310
<210> 2465
<211> 314
<212> PRT
<213> Mus musculus
<400> 2465
Met Glu Asp Met Pro Ala Gly Asn His Cys Thr Val Thr Val Phe Phe
1
                                    10
Leu Ala Gly Leu Ser Glu Gln Ser Glu Leu Gln Leu Pro Leu Phe Leu
                                25
Phe Phe Thr Gly Ile Tyr Leu Ile Thr Val Ser Gly Asn Leu Gly Met
Ile Ile Leu Ile Gly Leu Ser Ser Asn Leu His Thr Pro Met Tyr Tyr
                        55
Phe Leu Ser Ser Leu Ser Phe Ile Asp Phe Gly Gln Ser Thr Val Val
                                         75
                    70
Thr Pro Lys Met Leu Val Ser Phe Leu Thr Glu Lys Asn Leu Ile Thr
                                    90
Tyr Pro Glu Cys Leu Ala Gln Leu Tyr Phe Ala Ile Ile Phe Gly Thr
                                105
Ala Glu Ser Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala
Ile Cys Asn Pro Leu Val Tyr Asn Ile Ala Met Ser Ser Gln Ile Tyr
                        135
Cys Ser Leu Ile Ser Gly Val Tyr Ile Phe Ala Val Phe Cys Ala Ser
                    150
                                         155
Val Asn Met Gly Phe Met Phe Arg Ile Gln Phe Cys Lys Ser Asp Val
                                    170
                165
                                                         175
Ile Asn His Tyr Phe Cys Asp Phe Leu Pro Leu Leu Lys Leu Ala Cys
                                185
Ser Asn Thr Tyr Val Ser Glu Met Leu Ile Leu Phe Phe Gly Thr Leu
        195
                            200
Asn Ile Phe Val Pro Met Leu Thr Ile Ile Thr Ser Tyr Ile Ser Ile
                        215
Ile Ser Ser Ile Leu Arg Ile Ser Ser Ser Glu Gly Arg Ser Lys Ala
                    230
                                         235
Phe Ser Thr Cys Ser Ser His Ile Ser Ala Val Ala Val Phe Tyr Gly
                245
                                    250
                                                         255
Ser Thr Ala Phe Val Tyr Leu Gln Pro Ser Arg Val Ser Ser Ile Asp
            260
                                265
                                                     270
Gln Gly Lys Val Ser Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu
        275
                            280
                                                 285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Ser Val Ala Met
                        295
    290
                                             300
```

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305
                    310
<210> 2466
<211> 312
<212> PRT
<213> Mus musculus
<400> 2466
Met Glu Asp Met Ala Ala Gly Asn Gln Cys Thr Val Ala Glu Phe Phe
                                    10
Leu Ala Gly Leu Ser Glu Lys Pro Glu Leu Gln Leu Pro Leu Phe Leu
            20
                                25
Leu Phe Thr Gly Ile Tyr Thr Val Ala Gly Asn Leu Gly Met Ile Thr
                            40
Leu Ile Gly Leu Ser Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu
                        55
Ser Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Ile Thr Pro
                    70
                                        75
Lys Met Leu Val Ser Phe Leu Thr Glu Lys Asn Ile Ile Phe Tyr Ser
                                    90
                                                         95
Gly Cys Met Ala Gln Leu Tyr Phe Phe Ile Ile Phe Gly Val Ala Glu
            100
                                105
Cys Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
        115
Asn Pro Leu Leu Tyr Ser Val Ser Met Ser Tyr Gln Ile Tyr Ser Ser
                        135
Leu Ile Ser Gly Val Tyr Ile Phe Ala Val Val Cys Ser Ser Val Ile
                    150
                                        155
Thr Gly Phe Met Leu Arg Ile Gln Phe Cys Lys Leu Asp Val Ile Asn
                165
                                    170
                                                         175
His Tyr Phe Cys Asp Leu Leu Pro Leu Leu Lys Leu Ala Arg Ser Asn
            180
                                185
                                                    190
Thr Tyr Ile Asn Glu Met Leu Thr Leu Phe Val Ser Met Phe Asn Ile
        195
                            200
                                                 205
Cys Val Pro Val Met Thr Ile Ile Thr Ser Tyr Ile Phe Ile Ile Ala
    210
                        215
                                             220
Thr Ile Leu Asn Ile His Ser Arg Glu Gly Lys Phe Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Tyr Gly Ser Gly
                245
                                    250
Ala Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly
            260
                                265
                                                     270
Lys Val Ser Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu Asn Pro
        275
                            280
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Ser Val Ala Leu Lys Lys
                        295
                                             300
Ile Leu Glu Arg Lys Lys Val Met
305
                    310
<210> 2467
<211> 312
<212> PRT
<213> Mus musculus
<400> 2467
```

Met Glu Ile Lys Asn Cys Ser Val Val Thr Glu Phe Ile Leu Leu Gly

Lys Lys Ile Leu Glu Arg Lys Arg Phe Met

```
Pro Phe Tyr Ala Cys Thr Leu Val Gly Asn Val Ser Ile Leu Val Ala
                            40
Val Ile Ser Ser Thr Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly
                        5.5
Asn Leu Ser Val Phe Asp Met Gly Phe Ser Ser Val Thr Cys Pro Lys
                    70
Met Leu Phe Tyr Leu Met Gly Leu Ser Arg Leu Ile Ser Tyr Gln Asp
                                    90
Cys Val Ser Gln Leu Phe Phe Phe His Phe Leu Gly Ser Ile Glu Cys
                                105
            100
Phe Leu Tyr Thr Val Met Ala Tyr Asp Arg Phe Ala Ala Ile Cys His
        115
                            120
                                                125
Pro Leu Arg Tyr Ser Val Ile Met Asn Ser Lys Ile Cys Val Ala Leu
                        135
                                            140
Ala Val Gly Thr Trp Leu Leu Gly Cys Phe His Ser Ser Val Leu Thr
145
                    150
                                        155
Ser Leu Thr Phe Thr Leu Pro Tyr Cys Gly Pro Asn Glu Val Asp His
                                    170
                165
Phe Phe Cys Asp Ile Pro Ala Ile Leu Pro Leu Ala Ser Ala Asp Thr
           180
                                185
                                                    190
Ser Leu Ala Gln Arg Val Ser Phe Thr Asn Val Gly Leu Val Ser Leu
        195
                            200
Val Cys Phe Leu Leu Ile Leu Leu Ser Tyr Thr Arg Ile Thr Ile Ser
                        215
                                            220
Ile Leu Ser Ile Gln Ser Thr Glu Gly Arg Gln Arg Ala Phe Ser Thr
                    230
Cys Ser Ala His Leu Ile Ala Ile Leu Cys Ala Tyr Gly Pro Ile Ile
                                    250
                245
Thr Ile Tyr Leu Gln Pro Thr Pro Asn Pro Met Leu Gly Thr Val Val
                                265
            260
Gln Ile Leu Met Asn Leu Val Gly Pro Met Leu Asn Pro Leu Ile Tyr
                            280
Thr Leu Arg Asn Lys Glu Val Lys Ile Ala Leu Lys Lys Ile Leu His
                        295
Gly Lys Gly Ser Val Ser Glu Gly
<210> 2468
<211> 314
<212> PRT
<213> Mus musculus
<400> 2468
Met Arg Thr Leu Tyr Ser Asn Thr Ser Ser Thr Leu Ser Phe Met Leu
Thr Gly Phe Pro Glu Met Gln Ser Leu Glu His Trp Leu Ala Ala Leu
                                25
Leu Leu Leu Tyr Val Ile Ser Ile Val Gly Asn Ala Leu Ile Leu
Phe Ile Ile Lys Glu Glu Gln Ser Leu His His Pro Met Tyr Tyr Phe
Leu Ser Leu Leu Ser Val Asn Asp Leu Gly Val Ser Phe Ser Thr Leu
                                        75
Pro Thr Val Leu Ala Ser Met Cys Phe His Ile Pro Glu Thr Ala Phe
                                    90
```

10

Ile Pro His Thr Glu Gly Phe Glu Thr Leu Leu Phe Val Leu Phe Leu

```
Asp Ala Cys Leu Ala Gln Met Phe Phe Ile His Phe Phe Ser Trp Thr
            100
                                105
Glu Ser Gly Ile Leu Leu Ala Met Ser Phe Asp Arg Tyr Val Ala Ile
                            120
                                                125
        115
Cys Asn Pro Leu His Tyr Ser Ser Val Leu Thr Asp Ala Arg Val Ala
                        135
                                            140
His Met Gly Met Ser Ile Ile Ile Arg Ser Phe Cys Met Val Phe Pro
Leu Pro Phe Leu Leu Lys Arg Leu Pro Phe Cys Lys Ala Asn Val Leu
                                    170
                165
Thr His Ser Tyr Cys Leu His Pro Asp Leu Ile Arg Leu Pro Cys Gly
                                185
            180
Asp Thr Thr Ile Asn Ser Met Tyr Gly Leu Phe Ile Val Ile Ser Ala
                            200
        195
Phe Gly Val Asp Ser Val Leu Ile Leu Leu Ser Tyr Val Leu Ile Leu
                        215
Arg Ser Val Leu Ala Ile Ala Ser Arg Glu Glu Arg Leu Lys Thr Leu
                    230
                                        235
Asn Thr Cys Val Ser His Ile Ser Ala Val Leu Ile Phe Tyr Val Pro
                245
                                    250
Met Ile Ser Val Ser Met Val His Arg Phe Val Lys His Ala Pro Glu
                                265
Tyr Val His Lys Phe Thr Ser Leu Val Tyr Leu Phe Val Pro Pro Met
                            280
Leu Asn Pro Ile Ile Tyr Ser Ile Lys Thr Lys Glu Ile Arg Arg Arg
                        295
Leu His Lys Met Leu Leu Gly Thr Lys Phe
```

<211> 322

<212> PRT

<213> Mus musculus

<400> 2469

Leu Ile Ile Ser Leu Leu Asn Ala Ser Ser Leu Thr Pro Ala Ser Phe Ile Leu Asn Gly Ile Pro Gly Leu Glu Glu Val His Leu Trp Ile Ser 25 Phe Pro Leu Phe Thr Met Tyr Ser Ile Ala Leu Thr Gly Lys Phe Gly Leu Ile Tyr Leu Ile Tyr Ser Glu Glu Val Leu His Arg Pro Met Tyr Ile Phe Leu Ala Leu Leu Ser Phe Thr Asp Val Leu Met Cys Thr Ser 75 Thr Leu Pro Asn Thr Leu Cys Ile Leu Trp Phe Asn Val Lys Lys Ile 90 Asp Phe Lys Ala Cys Leu Ala Gln Met Phe Phe Val His Thr Phe Thr Gly Met Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val 120 125 Ala Ile Cys Tyr Pro Leu Arg Tyr Ala Thr Ile Leu Thr Asn Val Val 135 140 Ile Ala Lys Ala Gly Met Leu Thr Phe Leu Arg Gly Val Ile Leu Val 155 Ile Pro Phe Ile Phe Leu Thr Lys Arg Leu Pro Tyr Cys Lys Gly Asn 170 175 Val Ile Pro His Thr Tyr Cys Asp His Met Ser Val Ala Lys Ile Ser

```
180
                                185
Cys Gly Asn Val Gln Ile Asn Ala Ile Tyr Gly Leu Met Val Ala Leu
       195
                            200
Leu Ile Gly Gly Phe Asp Ile Leu Cys Ile Thr Val Ser Tyr Thr Met
                        215
                                            220
Ile Leu Arg Ala Val Val Ser Leu Ser Ser Ala Asp Ala Arg Gln Lys
                                        235
                    230
Ala Phe Ser Thr Cys Thr Ala His Ile Cys Ala Ile Val Ile Thr Tyr
                                    250
               245
Val Pro Ala Phe Phe Thr Phe Phe Thr His Arg Phe Gly Arg His Thr
            260
                                265
                                                    270
Ile Pro Pro His Ile His Ile Ile Met Ala Asn Leu Tyr Leu Leu Met
                                                285
       275
                            280
Pro Pro Thr Met Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile
                                            300
                       295
Glu Ser Val Ile Arg Phe Leu Phe Lys Gly Arg Glu Asn Ser Ser His
305
                    310
                                        315
Lys Ile
```

<210> 2470 <211> 317 <212> PRT

<213> Mus musculus

<400> 2470 Met Glu Gly Lys Asn Gln Thr Ala Pro Ser Glu Phe Ile Ile Leu Gly Phe Asp His Leu Asn Glu Leu Gln Tyr Leu Leu Phe Thr Ile Phe Phe Leu Thr Tyr Ile Cys Thr Leu Gly Gly Asn Val Phe Ile Ile Val Val Thr Ile Ala Asp Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Gly Asn Leu Ala Leu Ile Asp Ile Cys Tyr Thr Thr Asn Val Pro Gln Met Met Val His Leu Leu Ser Glu Lys Lys Ile Ile Ser Tyr Gly Gly Cys Val Thr Gln Leu Phe Ala Phe Ile Phe Phe Val Gly Ser Glu Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys Lys Pro Leu Arg Tyr Ser Phe Ile Met Asn Lys Ala Leu Cys Ser Trp Leu Ala Ala Ser Cys Trp Thr Gly Gly Phe Leu Asn Ser Val Leu His Thr Val Leu Thr Phe His Leu Pro Phe Cys Gly Asn Asn Gln Ile Asn Tyr Phe Phe Cys Asp Ile Pro Pro Leu Leu Ile Leu Ser Cys Gly Asp Thr Ser Leu Asn Glu Leu Ala Leu Leu Ser Ile Gly Ile Leu Ile Gly Trp Thr Pro Phe Leu Cys Ile Ile Leu Ser Tyr Leu Tyr Ile Ile Ser Thr Ile Leu Arg Ile Arg Ser Ser Glu Gly Arg His Lys Ala Phe Ser Thr Cys Ala Ser His Leu Leu Ile Val Ile Leu Tyr Tyr Gly Ser Ala Ile

```
Phe Thr Tyr Val Arg Pro Ile Ser Ser Tyr Ser Leu Glu Lys Asp Arg
                                 265
Leu Ile Ser Val Leu Tyr Ser Val Val Thr Pro Met Leu Asn Pro Val
                             280
Ile Tyr Thr Leu Arg Asn Lys Asp Ile Lys Glu Ala Met Lys Ala Ile
                        295
Gly Arg Lys Trp Lys Pro Pro Val Phe Ser Ser Asp Ile
                    310
<210> 2471
<211> 330
<212> PRT
<213> Mus musculus
<400> 2471
Met Thr Tyr Cys Ser Val Phe Gln Glu Met Ser Val Asn Cys Ser Leu
                                     10
Trp Gln Glu Asn Ser Leu Ser Val Lys Arg Phe Ala Phe Ala Lys Phe
                                25
Ser Glu Val Pro Gly Glu Cys Phe Leu Leu Phe Thr Leu Ile Leu Leu
                                                 4.5
Met Phe Leu Val Ser Leu Thr Gly Asn Ala Leu Ile Thr Leu Ala Ile
Cys Thr Ser Pro Ala Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn
                                        75
Leu Ser Leu Leu Glu Ile Gly Tyr Thr Cys Thr Val Ile Pro Lys Met
                                    90
Leu Gln Ser Leu Val Ser Glu Ala Arg Gly Ile Ser Arg Glu Gly Cys
            100
                                105
                                                    110
Ala Thr Gln Met Phe Phe Phe Thr Leu Phe Gly Ile Thr Glu Cys Cys
                            120
                                                 125
Leu Leu Ala Ala Met Ala Phe Asp Arg Cys Met Ala Ile Cys Ser Pro
                        135
                                            140
Leu His Tyr Thr Thr Arg Met Asn Arg Gly Val Cys Ala His Leu Ala
                    150
                                        155
Ile Val Ser Trp Gly Thr Gly Cys Ile Val Gly Leu Gly Gln Thr Asn
                                    170
Phe Ile Phe Ser Leu Asn Phe Cys Gly Pro Cys Glu Ile Asp His Phe
                                185
                                                    190
Phe Cys Asp Leu Pro Pro Val Leu Ala Leu Ala Cys Gly Asp Thr Ser
        195
                            200
                                                205
Gln Asn Glu Ala Ala Ile Phe Val Val Ala Ile Leu Cys Ile Ser Ser
                                            220
Pro Phe Leu Leu Ile Ile Tyr Ser Tyr Val Arg Ile Leu Val Ala Val
                    230
                                        235
Leu Val Met Pro Ser Pro Glu Gly Arg His Lys Ala Phe Ser Thr Cys
                                    250
Ser Ser His Leu Leu Val Val Thr Leu Phe Phe Gly Ser Gly Ser Ile
            260
                                265
Asn Tyr Leu Arg Pro Lys Ser Ser His Ser Pro Gly Met Asp Lys Leu
                            280
                                                285
Leu Ala Leu Phe Tyr Thr Ala Val Thr Ser Met Leu Asn Pro Ile Ile
                        295
Tyr Ser Leu Arg Asn Lys Glu Val Lys Ala Ala Leu Arg Arg Thr Leu
                    310
Gly Leu Lys Lys Val Leu Thr Met Asn Arg
```

330

```
<211> 314
<212> PRT
<213> Mus musculus
<400> 2472
Met Glu Asp Met Thr Ser Gly Asn Asn Cys Thr Val Thr Glu Phe Phe
                5
                                    10
1
Leu Ala Gly Leu Ser Glu Glu Pro Glu Leu Gln Leu Pro Leu Phe Leu
            20
                                25
Leu Phe Thr Gly Ile Tyr Leu Ile Thr Val Ala Gly Asn Leu Gly Met
                                                 45
                            40
Ile Thr Leu Ile Gly Ile Ser Ser His Leu His Thr Pro Met Tyr Tyr
                        55
Phe Leu Ser Ser Leu Ser Leu Ile Asp Phe Cys Gln Ser Thr Val Val
                    70
                                         75
Ile Pro Lys Met Leu Met Ser Phe Leu Val Glu Lys Asn Leu Ile Ser
                8.5
                                    90
Tyr Pro Gly Cys Met Ala Gln Leu Tyr Phe Phe Ile Thr Phe Gly Ile
                                105
            100
                                                     110
Ala Glu Cys Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala
                            120
                                                125
       115
Ile Cys Asn Pro Leu Leu Tyr Asn Ala Thr Met Ser Ser Gln Ile Tyr
    130
                        135
                                            140
Thr Ser Leu Ile Leu Gly Val Tyr Ile Phe Ala Val Ile Cys Ala Ser
                    150
                                                             160
                                        155
Val Asn Thr Gly Phe Met Ser Arg Ile Lys Phe Cys Lys Ser Asp Val
                                    170
                                                         175
                165
Ile Ser His Tyr Phe Cys Asp Phe Leu Pro Leu Leu Lys Leu Ala Cys
            180
                                185
                                                     190
Ser Asp Ile Tyr Ile Asn Glu Met Leu Ile Leu Ser Phe Gly Thr Val
        195
                            200
                                                 205
Asn Ile Cys Val Pro Leu Leu Thr Val Ile Thr Ser Tyr Ile Phe Ile
                        215
                                             220
Ile Ala Ser Ile Leu Arg Ile Arg Ser Ser Glu Gly Arg Ser Lys Ala
225
                    230
                                        235
Phe Ser Thr Cys Ser Ser His Ile Ser Ala Val Ala Val Phe Tyr Gly
                                                         255
                245
                                    250
Ser Ala Ala Phe Thr Tyr Leu Gln Pro Ser Ser Val Ser Leu Ile Asp
            260
                                265
Gln Gly Lys Val Ser Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu
        275
                            280
                                                285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Thr Val Ala Leu
                        295
Lys Thr Ile Leu Glu Arg Lys Lys Phe Met
305
                    310
<210> 2473
<211> 317
<212> PRT
<213> Mus musculus
<400> 2473
Met Ser Thr Phe His Asn Val Cys Ser Val Pro Ser Ser Leu Trp Leu
1
                                    10
Thr Gly Ile Pro Gly Leu Glu Thr Leu His Ile Trp Leu Ser Ile Pro
```

```
Phe Gly Ser Met Tyr Leu Val Ala Val Val Gly Asn Ile Thr Ile Leu
Ala Val Val Arg Val Glu Arg Ser Leu His Gln Pro Met Tyr Phe Phe
Leu Cys Met Leu Ala Val Ile Asp Leu Val Leu Ser Thr Ser Thr Met
Pro Lys Leu Leu Ala Ile Phe Trp Phe Gly Ala Gly His Ile Gly Leu
                                    90
Asp Ala Cys Leu Cys Gln Met Phe Leu Ile His Cys Phe Ala Thr Val
                                105
Glu Ser Gly Ile Phe Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile
                            120
Cys Asn Pro Leu Arg His Ser Met Val Leu Thr His Thr Leu Val Gly
                        135
Arg Leu Gly Leu Ala Ala Val Leu Arg Gly Val Leu Tyr Ile Gly Pro
                    150
                                        155
Leu Pro Leu Met Ile Arg Leu Arg Leu Pro Leu Tyr Lys Thr Arg Val
                                    170
Ile Ser His Ser Tyr Cys Glu His Met Ala Val Val Ala Leu Thr Cys
            180
                                185
Gly Asp Ser Arg Val Asn Asn Val Tyr Gly Leu Ser Ile Gly Phe Leu
Val Leu Ile Leu Asp Ser Ala Ala Ile Ala Ala Ser Tyr Val Met Ile
                        215
Phe Arg Ala Val Met Gly Leu Ala Thr Pro Glu Ala Arg Leu Lys Ala
                    230
                                        235
Leu Gly Thr Cys Gly Ser His Ile Cys Ala Ile Leu Ile Phe Tyr Val
                245
                                    250
Pro Ile Ala Val Ser Ser Leu Ile His Arg Phe Gly His Gln Val Pro
                                265
Pro Pro Ile His Thr Leu Leu Ala Asn Phe Tyr Leu Leu Ile Pro Pro
                            280
Ile Leu Asn Pro Ile Val Tyr Ala Val Arg Thr Lys Gln Ile Arg Asp
                        295
Arg Leu Leu Gln Ile Leu Lys Thr Gly Thr Lys Ile Arg
```

```
<210> 2474
```

<400> 2474

<211> 309

<212> PRT

<213> Mus musculus

```
115
                            120
Ile Pro Leu His Tyr Thr Ser Leu Leu Thr Ser Ser Ile Ile Gly Lys
                        135
                                            140
Val Gly Leu Val Leu Ile Ala Arg Ser Val Ala Val Val Thr Pro Gly
                    150
                                        155
Val Leu Leu Ile Leu Arg Leu Asp Phe Cys Arg Ser Asn Ile Ile His
                                    170
His Thr Tyr Cys Glu Asn Met Gly Ile Ala Lys Leu Ala Cys Asn Ser
            180
                                185
                                                    190
Phe Thr Leu Asn Ser Ile Tyr Gly Leu Ser Ala Ala Leu Leu Thr Thr
                            200
                                                 205
Gly Leu Asp Phe Val Phe Ile Ser Leu Ser Tyr Trp Leu Ile Leu Lys
                        215
                                             220
Thr Val Leu Gln Leu Pro Ser Lys Glu Ala Arg Thr Lys Ala Phe Gly
                    230
                                         235
Thr Cys Gly Ala His Ile Cys Val Ile Leu Ile Phe Tyr Thr Leu Ala
                                    250
                245
Phe Phe Ser Phe Phe Thr His Arg Phe Gly His His Val Ser Arg His
                                                     270
            260
                                265
Thr Leu Ile Leu Leu Ala Asn Leu Tyr Leu Leu Ile Pro Pro Thr Met
                            280
Asn Pro Ile Val Tyr Gly Ile Lys Thr Lys Glu Ile Arg Met Arg Val
                        295
                                             300
Val Gly Thr Cys Ser
305
<210> 2475
<211> 328
<212> PRT
<213> Mus musculus
<400> 2475
Met Leu Ile Leu Ser Val Arg Phe Leu Val Asp Lys Pro Ser Glu Met
                                    10
Arg Asn Arg Thr Ser Val Thr Tyr Phe Ile Leu Leu Gly Leu Thr Asp
                                25
Asp Pro Glu Leu Gln Val Val Ile Phe Phe Phe Leu Phe Leu Thr Tyr
Leu Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu Leu
Asp Ser His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe Ser
                    70
Phe Leu Glu Ile Ser Phe Thr Ser Val Cys Asn Pro Arg Phe Leu Val
                                    90
Ser Ile Leu Thr Lys Asp Lys Ser Ile Ser Tyr Asn Ala Cys Ala Ala
```

105 Gln Leu Phe Phe Ile Phe Leu Gly Ser Thr Glu Phe Phe Leu Leu 120 Ala Ser Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His

Tyr Thr Thr Ile Ile Ser Asn Lys Ile Cys His Gln Leu Ile Ile Ser

Ser Trp Leu Ala Gly Phe Leu Val Val Phe Pro Pro Leu Ala Met Gly

Leu Asp Leu Asp Phe Cys Asp Ser Asn Thr Ile Asp His Phe Thr Cys 185

Asp Ser Ala Pro Leu Leu Gln Ile Ser Cys Thr Asp Thr Ser Thr Leu 200

140

190

205

155

170

135

150

```
Glu Leu Met Ser Phe Ile Leu Ala Leu Ile Thr Leu Met Thr Thr Leu
                        215
Met Leu Ile Ile Leu Ser Tyr Thr Cys Ile Leu Arg Thr Ile Leu Lys
                    230
                                        235
Phe Pro Ser Ala Lys Gln Arg Glu Lys Ala Phe Ser Thr Cys Ser Ser
His Met Ile Val Val Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met Tyr
                                265
Val Lys Thr Ser Ala Lys Ala Gly Val Ala Leu Thr Lys Gly Val Ala
                            280
Met Leu Asn Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr Thr
                        295
Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Leu Val Arg Lys
                                        315
                    310
Lys Leu Ala Ser Lys Leu Leu Ile
                325
```

<210> 2476 <211> 311 <212> PRT

<213> Mus musculus

<400> 2476 Met Gln Asn Gln Ser Phe Val Thr Glu Phe Val Phe Leu Gly Leu Ser Gln Asn Pro Asn Leu Gln Lys Leu Ile Phe Ile Ile Cys Leu Val Val Tyr Ile Ala Thr Met Gly Ser Asn Met Met Ile Val Val Thr Val Val Cys Ser Pro Thr Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe 55 Leu Ser Leu Leu Asp Ala Ser Phe Ser Ser Ala Met Thr Pro Lys Met 75 Ile Leu Asp Ser Leu Tyr Lys Arg Lys Thr Ile Ser Phe Glu Gly Cys 90 Met Ile Gln Leu Phe Val Glu His Phe Leu Gly Gly Ala Glu Met Ile 105 Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 Leu His Tyr Ser Ser Ile Met Thr Arg Lys Val Cys Gly Thr Leu Val 140 Gly Val Ala Trp Ala Gly Gly Leu Leu His Ser Thr Val Gln Ile Ile 150 155 Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asn His Phe 170 Met Cys Asp Leu Phe Pro Leu Leu Glu Leu Ala Cys Thr Asp Thr His 190 Ile Phe Gly Leu Phe Val Val Ala Asn Ser Gly Leu Ile Cys Ile Ile 195 200 Val Phe Val Leu Leu Val Ser Tyr Gly Phe Ile Leu Leu Ser Leu 215 Arg Ser Gln Ser Ser Glu Gly Arg Trp Lys Ala Leu Ser Thr Cys Gly 230 235 Ser His Val Ala Val Val Leu Phe Phe Val Pro Cys Ile Phe Ile 245 250 Tyr Ala Arg Pro His Ser Ala Phe Ser Phe Asp Lys Met Val Ala Leu 265 Phe Tyr Thr Met Leu Ser Pro Leu Leu Asn Pro Ile Ile Tyr Thr Phe

```
275
                            280
Arg Asn Lys Asp Met Lys Asn Ala Ile Arg Lys Leu Trp Lys Lys Leu
                        295
                                             300
Val Met Val Ser Asp Glu Arg
<210> 2477
<211> 305
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (12)...(18)
<223> Any amino acid
<221> VARIANT
<222> (20)...(25)
<223> Any amino acid
<400> 2477
Met Gln Asn Gln Ser Phe Ile Thr Glu Phe Val Xaa Xaa Xaa Xaa Xaa
1
Xaa Xaa Pro Xaa Xaa Xaa Xaa Xaa Val Tyr Ile Ala Thr Ile Gly
            20
Gly Asn Met Met Ile Val Val Thr Val Val Cys Thr Pro Ala Leu Leu
                             40
Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe Leu Ser Leu Leu Asp Ala
    50
                        55
Ser Phe Ser Ser Ala Met Thr Pro Lys Met Ile Val Asp Ser Leu Tyr
                    70
                                         75
Glu Arg Lys Thr Ile Ser Phe Glu Gly Cys Met Ile Gln Leu Phe Ala
                8.5
                                    90
Glu His Phe Phe Gly Gly Ala Glu Val Ile Val Leu Ser Ala Met Ala
            100
                                105
Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Ser Ser Ile
        115
                            120
                                                 125
Met Thr Leu Arg Leu Cys Gly Thr Leu Val Gly Val Ala Trp Thr Gly
                        135
                                            140
Gly Phe Leu His Ser Ile Ile Gln Ile Ile Phe Thr Leu Gln Leu Pro
                    150
                                         155
Phe Cys Gly Pro Asn Ile Ile Asp His Phe Ile Cys Asp Leu Tyr Pro
                165
                                    170
                                                         175
Leu Leu Glu Leu Ala Cys Thr Asp Thr His Ile Phe Gly Leu Leu Val
            180
                                185
                                                     190
Val Ala Asn Ser Gly Phe Ile Cys Ile Ile Ile Phe Thr Leu Leu Leu
                            200
                                                 205
Val Ser Tyr Gly Phe Ile Leu Leu Ser Leu Arg Ser His Ser Ser Glu
                        215
                                            220
Gly Arg Trp Lys Ala Leu Ser Thr Cys Gly Ser His Ile Ala Val Val
                    230
                                         235
Val Leu Phe Phe Val Pro Cys Ile Phe Thr Tyr Ala Arg Pro Pro Thr
                245
                                    250
                                                         255
Ala Phe Ser Phe Asp Lys Met Val Ala Ile Phe Tyr Thr Met Leu Ser
                                265
                                                     270
Pro Leu Leu Asn Pro Met Ile Tyr Thr Phe Arg Asn Lys Asp Met Lys
                            280
Asn Ala Ile Arg Lys Met Trp Thr Arg Leu Ile Val His Ser Asp Lys
```

290 295 300 Lys 305

<210> 2478 <211> 312 <212> PRT <213> Mus musculus

<400> 2478

Met Gly Arg Glu Asn Gln Thr Ser Thr Phe Glu Phe Leu Leu Trp Gly 1 5 10 Leu Ser Glu Gln Leu Gln Gln Gln His Ile Leu Phe Leu Ile Phe Leu 25 Trp Met Tyr Leu Val Thr Val Val Gly Asn Leu Leu Ile Val Leu Ala 35 40 Ile Ser Thr Asp Val Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ala 55 Asn Leu Ser Cys Asp Asp Ile Leu Phe Thr Ser Thr Thr Ile Pro Lys 70 75 Ala Leu Val Asn Ile His Thr Gln Ser Arg Thr Ile Ser Tyr Ala Gly 90 Cys Leu Val Gln Leu Tyr Phe Phe Leu Thr Phe Gly Asp Met Asp Ile 100 105 Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His 120 Pro Leu His Tyr Arg Met Ile Met Ser Phe Gln Arg Cys Ser Leu Leu 135 140 Val Thr Ala Cys Trp Ile Leu Thr Thr Phe Val Ala Met Thr His Thr 155 150 Leu Leu Ile Phe Arg Leu Ser Phe Cys Ser Lys Val Ile Pro Asp 170 165 Phe Phe Cys Asp Leu Gly Pro Leu Met Lys Ile Ala Cys Ser Glu Thr 180 185 190 Arg Ile Asn Glu Leu Val Leu Leu Phe Leu Gly Gly Ala Val Ile Leu 205 195 200 Ile Pro Phe Leu Leu Ile Leu Val Ser Tyr Ile Arg Ile Val Ser Ala 220 215 Ile Leu Arg Leu Pro Ser Ala Gln Gly Arg Arg Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Ser Val Val Ala Leu Cys Phe Gly Thr Val Ile 250 Lys Ala Tyr Leu Cys Pro Ser Ser Ser Ser Ser Asn Ser Val Val Glu 265 270 Asp Thr Ala Ala Val Val Met Tyr Thr Val Val Thr Pro Leu Leu Asn 280 Pro Phe Ile Tyr Ser Leu Asn Lys Asp Met Lys Gly Ala Leu Val Arg 295 300 Ile Leu Lys Gly Lys Val Ser Phe 310

<210> 2479

<211> 308

<212> PRT

<213> Mus musculus

<400> 2479

```
Met Glu Lys Asn Ala Thr Leu Leu Thr Glu Phe Val Leu Thr Gly Leu
Ser His Gln Pro Leu Trp Asn Ile Pro Leu Phe Leu Val Phe Leu Val
            20
Ile Tyr Leu Ile Thr Ile Val Gly Asn Val Ser Leu Ile Thr Leu Ile
                            40
Trp Thr Asp Pro His Leu His Ile Pro Met Tyr Leu Phe Leu Gly Ser
                        55
Leu Ala Phe Val Asp Thr Ser Ile Ser Ser Ile Val Val Pro Lys Met
                    70
                                        75
Leu Leu Asn Phe Phe Gly Lys Ser Lys Val Ile Thr Leu Ser Glu Cys
                                    90
Met Ala Gln Phe Phe Leu Phe Asn Ile Ser Ala Thr Thr Glu Cys Phe
            100
                                105
Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
Leu Leu Tyr Pro Val Val Met Thr Asn Gly Leu Cys Val Trp Leu Ile
                        135
Ala Leu Ser Phe Val Ala Gly Ile Ile His Ala Leu Ile His Glu Gly
                    150
                                        155
Phe Leu Leu Arg Leu Thr Phe Cys Asn Ser Asn Met Ile His Asn Phe
                165
                                    170
Tyr Cys Asp Ile Ile Ser Leu Leu Lys Ile Ser Cys Thr Asp Thr Ser
            180
                                185
Leu Asn Tyr Leu Ile Val Phe Ile Phe Ser Gly Ser Ile Gln Val Phe
        195
                            200
Thr Ile Ser Thr Ile Leu Val Ser Tyr Thr Ile Ile Leu Phe Thr Ile
Leu Lys Lys Lys Ser Ala Lys Gly Ile Lys Lys Ala Phe Ser Thr Cys
                    230
                                        235
Gly Ala His Leu Leu Ser Val Ser Leu Tyr Tyr Gly Pro Leu Leu Phe
                245
                                    250
Met Tyr Val His Pro Ala Ser Ser Glu Val Asp Asp Gln Asp Met Ile
Asp Ser Leu Phe Tyr Thr Val Ile Ile Pro Val Leu Asn Pro Ile Ile
                            280
Tyr Ser Leu Arg Asn Lys Gln Val Ile Asp Ser Leu Ala Lys Phe Leu
   290
                        295
Lys Arg Asn Val
305
```

```
<210> 2480
<211> 309
<212> PRT
```

<213> Mus musculus

<400> 2480

 Met
 Glu
 Asp
 Gly
 Asn
 Thr
 Thr
 Leu
 Leu
 Thr
 Glu
 Phe
 Val
 Leu
 Thr
 Gly

 Leu
 Thr
 Asp
 His
 Gln
 Gln
 Val
 Pro
 Leu
 Phe
 Leu
 Ala
 Leu
 Phe
 Leu
 Phe
 Leu
 Gly
 Ser
 Ala
 Phe
 Leu
 Gly
 Ser
 Ala
 Phe
 Leu
 He
 Gly
 Ser
 Ala
 Phe
 Leu
 Phe
 Leu
 Gly
 Ser
 Leu
 Phe
 Leu
 Ala
 Phe

```
85
                                    90
Cys Met Ile Gln Phe Phe Ala Phe Ala Phe Gly Gly Thr Thr Glu Cys
                                105
Phe Leu Leu Gly Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
                                                125
Pro Leu Leu Tyr Pro Val Ile Met Thr Asn Arg Leu Cys Ile Arg Leu
                        135
                                             140
Leu Val Ser Val Phe Ile Gly Gly Phe Leu His Ser Leu Phe His Val
                    150
                                        155
Leu Phe Leu Leu Arg Leu Thr Phe Cys Asn Ser Asn Ile Ile His His
                                    170
                165
Phe Tyr Cys Asp Ile Ile Pro Leu Tyr Asn Ile Ser Cys Thr Asp Pro
            180
                                185
Thr Leu Asn Leu Leu Val Phe Ile Leu Ser Gly Ser Ile Gln Val
                            200
                                                 205
        195
Phe Thr Ile Met Thr Val Leu Val Ser Tyr Thr Leu Val Leu Phe Thr
                        215
Ile Leu Lys Met Lys Ser Leu Gln Gly Ile Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ala His Leu Leu Ser Val Ser Leu Tyr Tyr Gly Pro Leu Leu
                245
                                    250
Phe Met Tyr Val Leu Pro Ala Ser Gln Gln Thr Asp Gly Gln Gly Met
                                265
Met Asp Ser Leu Phe Tyr Thr Val Ile Ile Pro Val Leu Asn Pro Ile
                            280
Ile Tyr Ser Leu Arg Asn Lys Gln Val Thr Asp Ser Leu Lys Lys Arg
   290
                        295
                                             300
Leu Glu Arg His Val
305
<210> 2481
<211> 325
<212> PRT
<213> Mus musculus
<400> 2481
Met Thr Gln Thr Pro Thr Lys Ser Phe Leu Gln Met Lys His Asp Glu
                                    10
Ile Glu Ala Glu Val Asn Ile Ser Thr Val Ile Gln Phe Val Leu Leu
Gly Phe Ser Ala Leu Pro Asn Leu Gln Gly Ile Leu Ser Ala Leu Phe
Ser Ile Ile Tyr Met Ile Ile Leu Thr Gly Asn Cys Leu Ile Ile Leu
                        55
Ile Thr Arg Leu Asp His Thr Leu His Lys Pro Met Tyr Phe Phe Leu
                    70
                                        75
Ala Asn Phe Ser Ser Leu Glu Ile Cys Tyr Val Ser Val Thr Val Pro
                                    90
Arg Ile Leu Phe Asn Ile Trp Thr Gln Asp Arg Asn Ile Ser Val Leu
            100
                                105
Ala Cys Ala Val Gln Met Cys Phe Phe Leu Met Leu Gly Thr Asp Glu
                            120
                                                125
        115
Cys Phe Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys
    130
                        135
                                            140
Asn Pro Leu His Tyr Pro Leu Ile Met Asn Ser Lys Lys Cys Thr Gln
                    150
                                        155
```

Leu Ala Ala Gly Ser Trp Leu Ser Gly Ile Pro Ile Gln Ile Gly Gln

170

```
Thr Cys Trp Ile Phe Ser Met His Phe Cys Asp Ser Asn Glu Ile Asp
His Phe Phe Cys Asp Ile Pro Pro Ile Leu Lys Leu Ala Cys Gly Asp
                            200
Thr Ser Val His Glu Leu Ser Val Tyr Val Val Val Met Val Val Ala
                        215
Ala Phe Pro Phe Ile Leu Val Leu Thr Ser Tyr Ser Lys Ile Ile Ala
                    230
Thr Ile Leu Arg Leu Pro Thr Ala Lys Gly Arg Ala Lys Ala Phe Ser
                245
                                    250
Thr Cys Ser Ser His Leu Leu Val Val Leu Phe Tyr Gly Ser Gly
                                265
Thr Ile Thr Tyr Leu Arg Pro Lys Ser Thr His Ser Pro Gly Ile Asp
                            280
Lys Leu Leu Ser Leu Phe Tyr Thr Ile Val Thr Pro Met Phe Asn Pro
                        295
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Val Val Ala Leu Arg Lys
                   310
Leu Ile Leu Gln Lys
```

<210> 2482 <211> 285 <212> PRT

<213> Mus musculus

<400> 2482

Met Glu Pro Gly Asn His Thr Met Val Thr Glu Phe Ile Ile Leu Gly Leu Thr Glu Asn Pro Thr Leu Cys Cys Ile Phe Phe Val Leu Phe Leu 25 Gly Val Tyr Leu Thr Thr Ile Leu Gly Asn Val Ser Ile Ile Met Leu 40 Ile Arg Arg Ser Pro Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 His Leu Ala Phe Val Asp Ile Gly Tyr Ser Ser Ser Val Thr Pro Val 70 75 Met Ile Val Ser Phe Leu Arg Glu Arg Thr Ala Ile Pro Val Ala Gly 90 Cys Ile Val Gln Leu Gly Ser Asp Val Val Phe Gly Thr Ala Glu Cys 100 105 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser 120 125 Pro Leu Leu Tyr Ser Thr Leu Met Ser Pro Lys Val Cys Leu Ile Leu 140 Leu Val Ile Ser Tyr Val Gly Gly Cys Val Asn Ser Ser Ser Phe Thr 150 155 Ser Cys Leu Leu Ser Leu Thr Phe Cys Gly Pro Asn Lys Val Asn His 170 Phe Phe Cys Asp Leu Pro Pro Leu Val Glu Leu Ser Cys Thr His Val 180 185 Tyr Val Ala Glu Met Ser Pro Ala Ile Ser Ala Gly Ser Ile Ile Val 200 Ile Thr Leu Phe Val Ile Ile Ile Ser Tyr Val Tyr Ile Leu His Ser 215 220 Ile Leu Arg Met Arg Ser Thr Glu Gly Arg His Lys Ala Phe Ser Thr 230 235 Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Thr Val Thr

```
245
                                   250
Phe Val Tyr Val Ile Pro Glu Ser Ser His Ser Pro Asn Lys Ile Lys
           260
                               265
Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu
<210> 2483
<211> 313
<212> PRT
<213> Mus musculus
<400> 2483
Met Lys Asn Gln Ser Val Lys Ile Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
                 5
Asp Asp Pro Gln Leu Gln Ile Leu Val Phe Leu Phe Leu Phe Asn
                                25
           20
Tyr Ile Leu Ser Val Met Gly Asn Leu Val Ile Ile Leu Leu Thr Leu
                            40
Leu Asp Pro His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                       55
Ser Phe Leu Glu Ile Ala Phe Thr Thr Val Cys Ile Pro Arg Phe Leu
                   70
                                        75
Met Ser Ile Leu Ser Gly Asp Arg Thr Ile Ser Tyr Asn Ala Cys Ala
               85
Ala Gln Leu Phe Phe Phe Leu Leu Gly Ala Thr Glu Phe Tyr Leu
                                105
           100
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu
                           120
                                                125
His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Leu Leu Val Leu
   130
                       135
Ser Cys Trp Val Thr Gly Phe Leu Val Ile Phe Pro Pro Leu Leu
                   150
                                        155
Gly Leu Lys Leu Asp Phe Cys Ala Ser Lys Thr Ile Asp His Phe Leu
              165
                                    170
Cys Asp Thr Ser Pro Val Leu Gln Leu Ser Cys Thr Asp Thr His Phe
                                                    190
        180
                                185
Ile Glu Leu Met Ala Phe Ala Leu Ala Val Met Thr Leu Val Ile Thr
       195
                            200
Leu Ile Leu Val Ile Leu Ser Tyr Ile Leu Ile Ile Lys Thr Ile Leu
                        215
Lys Phe Pro Ser Ala Gln Gln Arg Arg Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Val Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met
                                    250
                245
Tyr Met Lys Thr Ser Ala Lys Glu Arg Val Thr Leu Asn Lys Gly Val
                                265
Ala Val Leu Asn Thr Val Ile Lys Arg Val Leu Thr Pro Gly Gln Glu
                            280
Glu His Asn Lys Pro Glu Ser Ser Ala Ala Lys Leu Tyr Cys Leu His
                        295
Leu Gln Glu Gln Glu Cys Lys Lys Gln
                    310
```

<210> 2484

<211> 324

<212> PRT

<213> Mus musculus

```
<400> 2484
Met Asn Glu Thr Asn Tyr Ser Arg Val Thr Glu Phe Val Leu Leu Gly
                                    10
Leu Ser Ser Ser Lys Glu Leu Gln Pro Phe Leu Phe Leu Ile Phe Ser
                                25
Leu Leu Tyr Leu Ala Ile Leu Leu Gly Asn Phe Leu Ile Ile Leu Thr
        35
Val Thr Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ala
                                            60
Asn Leu Ser Phe Ile Asp Met Cys Val Ala Ser Phe Ala Thr Pro Lys
                    70
Met Leu Ala Asp Phe Leu Val Glu Arg Lys Thr Ile Ser Phe Glu Ala
                                    90
Cys Leu Ala Gln Ile Phe Phe Val His Leu Phe Thr Gly Gly Glu Met
                                105
                                                    110
Val Leu Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu His Tyr Met Thr Ile Met Ser Arg Arg Val Cys Ile Ile Leu
                        135
Val Cys Ile Ser Trp Phe Val Gly Phe Ile His Thr Thr Ser, Gln Leu
                    150
                                        155
Ala Phe Thr Val Asn Leu Pro Phe Cys Gly Pro Asn Lys Val Asp Ser
                165
                                    170
                                                        175
Phe Phe Cys Asp Leu Leu Val Thr Lys Leu Ala Cys Ile Asp Thr
            180
                                185
Tyr Val Val Ser Leu Leu Ile Val Ala Asp Ser Gly Phe Leu Ser Met
        195
                            200
Ser Ser Phe Leu Leu Val Val Ser Tyr Thr Val Ile Leu Ile Thr
                        215
Val Arg Asn Arg Ser Ser Ala Ser Met Ala Lys Ala Arg Ser Thr Leu
                    230
                                        235
Thr Ala His Ile Thr Val Val Leu Phe Phe Gly Pro Cys Ile Phe
                245
                                    250
Ile Tyr Val Trp Pro Phe Ser Ser Tyr Ser Val Asp Lys Val Leu Ala
                                265
            260
Val Phe Tyr Thr Ile Phe Thr Pro Ile Leu Asn Pro Val Ile Tyr Thr
                            280
Leu Arg Asn Lys Glu Val Lys Ala Ala Met Ser Lys Leu Arg Gly Arg
                        295
                                            300
Tyr Leu Lys Pro Gly Gln Val Ser Ala Leu Ile Arg Asn Val Leu Phe
                    310
                                        315
Leu Glu Thr Lys
```

```
<210> 2485
```

<400> 2485

Met Lys Asn Lys Thr Ser Leu Thr Glu Phe Ile Leu Leu Gly Leu Thr 1 5 10 15 Asp Val Pro Glu Leu Gln Val Ala Val Phe Thr Phe Leu Leu Leu Ala 20 25 30 Tyr Val Phe Ser Met Ile Gly Asn Leu Thr Ile Leu Val Leu Thr Leu 35 40 45 Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe

<211> 309

<212> PRT

<213> Mus musculus

```
55
Ser Phe Leu Glu Ile Ser Phe Thr Asn Ile Phe Ile Pro Arg Val Leu
                    70
                                        75
Val Ser Ile Thr Thr Gly Asn Lys Ser Ile Ser Phe Ala Gly Cys Phe
                85
                                    90
Ala Gln Tyr Phe Phe Ala Ile Phe Leu Gly Ala Thr Glu Phe Tyr Leu
                                105
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                 125
His Tyr Met Ala Ile Met Ser Asn Arg Val Cys Thr His Leu Val Leu
    130
                        135
                                             140
Cys Ser Trp Leu Gly Gly Leu Met Ala Ile Ile Pro Pro Ile Thr Leu
                    150
                                        155
Met Ser Gln Gln Asn Phe Cys Ala Ser Asn Arg Leu Asn His Tyr Phe
                                    170
                165
                                                         175
Cys Asp Phe Glu Pro Leu Leu Glu Leu Ser Cys Ser Asp Thr Ser Leu
            180
                                185
Ile Glu Lys Val Val Phe Leu Val Ala Ser Val Thr Leu Val Val Thr
        195
                            200
Leu Met Leu Val Thr Leu Ser Tyr Thr Phe Ile Ile Lys Thr Ile Leu
                        215
Lys Leu Pro Ser Ala Gln Gln Arg Thr Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Ile Ser Leu Ser Tyr Gly Ser Cys Phe Phe Met
                245
                                    250
Tyr Val Lys Pro Ser Ala Lys Val Gly Gly Thr Phe Asp Lys Gly Val
            260
                                265
                                                     270
Ala Leu Leu Ile Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                            280
Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Thr Val Lys
                        295
                                             300
Lys Leu Val Asn Leu
305
<210> 2486
<211> 321
<212> PRT
<213> Mus musculus
<400> 2486
Met Asn Glu Arg Asn Tyr Ser His Val Thr Glu Phe Val Leu Leu Gly
1
                                    10
Leu Ser Ser Ser Lys Glu Leu Gln Pro Phe Leu Phe Leu Ile Phe Ser
            20
                                25
Leu Leu Tyr Leu Ala Ile Leu Leu Gly Asn Phe Leu Ile Ile Leu Thr
        35
                            40
Val Thr Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ala
                        55
                                             60
Asn Leu Ser Phe Ile Asp Met Cys Val Ala Ser Phe Ala Thr Pro Lys
                    70
                                        75
                                                             80
Met Leu Ala Asp Phe Leu Val Glu Arg Lys Thr Ile Ser Phe Lys Ala
                                    90
                8.5
                                                        95
Cys Leu Ala Gln Ile Phe Cys Ile His Leu Phe Gly Gly Glu Met
           100
                                105
                                                    110
```

Val Leu Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys

Pro Leu His Tyr Met Thr Ile Met Ser Arg Arg Val Cys Ile Thr Leu

```
Val Ile Met Pro Trp Phe Val Gly Phe Ile His Thr Thr Ser Gln Leu
                    150
Ala Phe Thr Val Asn Leu Pro Phe Cys Gly Pro Asn Gln Val Asp Ser
                165
                                    170
                                                        175
Phe Phe Cys Asp Leu Pro Leu Val Thr Lys Leu Ala Cys Thr Asp Thr
            180
                                185
Tyr Phe Val Ser Leu Leu Ile Val Ala Asp Ser Gly Val Leu Thr Leu
                            200
Ser Thr Phe Val Phe Leu Val Ile Ser Tyr Thr Val Val Leu Ile Thr
                        215
Val Arq Asn Arg Ser Ser Ala Ser Met Ala Lys Ala Arg Ser Thr Leu
                    230
                                        235
Thr Ala His Ile Ile Val Val Leu Phe Phe Gly Pro Cys Ile Phe
                                    250
                245
Val Tyr Ala Cys Pro Leu Asn Gly Ser Ser Val Asp Lys Val Leu Ala
                                265
                                                    270
Val Phe Tyr Thr Ile Phe Thr Pro Ile Leu Asn Pro Leu Ile Tyr Thr
                            280
Leu Arg Asn Lys Asp Met Lys Ala Ala Met Ser Lys Leu Arg Gly Gln
                        295
                                            300
Tyr Met Lys Pro Arg Gln Val Phe Glu Leu Val Arg Asn Val Leu Phe
                    310
Leu
```

<210> 2487 <211> 321 <212> PRT

<213> Mus musculus

<400> 2487

Met Asn Glu Arg Asn Tyr Ser Arg Val Thr Glu Phe Val Leu Leu Gly 10 Leu Ser Ser Ser Lys Glu Leu Gln Pro Phe Leu Phe Leu Ile Phe Ser Leu Leu Tyr Leu Ala Ile Leu Leu Gly Asn Phe Leu Ile Ile Leu Thr Val Thr Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ala Asn Leu Ser Phe Ile Asp Met Cys Val Ala Ser Phe Ala Thr Pro Lys 70 Met Leu Ala Asp Phe Leu Val Glu Arg Lys Thr Ile Ser Phe Glu Ala 90 Cys Leu Ala Gln Ile Phe Cys Val His Gln Phe Ala Gly Gly Glu Met 105 Val Leu Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu His Tyr Met Thr Ile Met Ser Arg Arg Val Cys Ile Thr Leu 135 140 Val Ile Ile Pro Trp Phe Val Gly Phe Ile His Thr Met Ser Gln Leu 155 150 Ala Phe Thr Val Asn Leu Pro Phe Cys Gly Pro Asn Gln Val Asp Ser 170 175 Phe Phe Cys Asp Leu Pro Leu Val Thr Lys Leu Ala Cys Thr Asp Thr 185 190 Tyr Phe Val Ser Leu Leu Ile Val Ala Asp Ser Gly Val Leu Thr Leu 200 Ser Thr Phe Val Phe Leu Val Ile Ser Tyr Thr Val Ile Leu Ile Thr

```
210
                      215
                                         220
Val Arg Asn Arg Ser Ser Ala Ser Met Ala Lys Ala Arg Ser Thr Leu
       230 235
Thr Ala His Ile Thr Val Val Leu Phe Phe Gly Pro Cys Ile Phe
              245
                                  250
Ile Tyr Ala Trp Pro Phe Asn Gly Tyr Ser Val Asp Lys Val Leu Ala 260 265 270
Val Phe Tyr Thr Ile Phe Thr Pro Ile Leu Asn Pro Leu Ile Tyr Thr
                          280
Leu Arg Asn Lys Glu Val Lys Ala Ala Met Ser Lys Leu Arg Gly Arg
                                         300
                      295
Tyr Leu Lys Pro Gly Gln Val Ser Glu Leu Ile Arg Asn Val Leu Phe
305
                   310
Met
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<210> 2488

<211> 316

<212> PRT

<213> Mus musculus

<400> 2488

| Met 1 | Asp | Arg | Gly | Asn 5 | Thr | Thr | Ala | Gly | Phe 10 | Val | Leu | Leu | Gly | Leu 15 | Phe |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Asn | His | Thr | Arg 20 | Ala | His | Leu | Phe | Leu 25 | Phe | Val | Leu | Val | Leu 30 | Thr | Val |
| Ala | Phe | Asn 35 | Ser | Val | Val | Gly | Asn 40 | Ala | Leu | Leu | Leu | Leu 45 | Leu | Ile | His |
| Gln | Asp 50 | Arg | Arg | Leu | His | Thr 55 | Pro | Met | Tyr | Phe | Leu 60 | Leu | Ser | Gln | Leu |
| Ser 65 | Leu | Met | Asp | Met | Met 70 | Leu | Val | Ser | Thr | Val 75 | Val | Pro | Gln | Met | Ala 80 |
| Ala | Gly | Tyr | Leu | Met 85 | Gly | Lys | Lys | Phe | Ile 90 | Ser | Ala | Ala | Gly | Cys 95 | Gly |
| Phe | Gln | Ile | Phe 100 | Phe | Phe | Leu | Thr | Leu 105 | Gly | Gly | Gly | Glu | Cys 110 | Phe | Leu |
| | | 115 | | | _ | Asp | 120 | _ | | | | 125 | | | • |
| Arg | Tyr 130 | Pro | Val | Leu | Met | Ser 135 | Trp | Gln | Leu | Cys | Leu 140 | Arg | Leu | Thr | Val |
| Ala 145 | Ser | Trp | Leu | Leu | Gly 150 | Ala | Ala | Asp | Gly | Ala 155 | Met | Gln | Ala | Ala | Ala 160 |
| Thr | Leu | Ser | Phe | Gln 165 | Phe | Cys | Ser | Arg | Asn 170 | Glu | Ile | Asp | His | Phe 175 | Phe |
| Cys | Glu | Ala | Pro 180 | Val | Leu | Leu | Arg | Leu 185 | Ala | Cys | Gly | Asp | Thr 190 | Ser | Ala |
| Phe | Glu | Phe 195 | Phe | Met | Tyr | Ile | Cys 200 | Cys | Val | Leu | Met | Leu 205 | Leu | Ile | Pro |
| | 210 | | | | | Ser 215 | - | _ | | | 220 | | | | |
| 225 | | _ | | | 230 | Ala | _ | _ | _ | 235 | | | | - | 240 |
| Ser | His | Leu | Ala | Val 245 | Val | Gly | Leu | Phe | Tyr 250 | Gly | Ala | Ala | Thr | Phe 255 | Ser |
| _ | | _ | 260 | | | Ser | _ | 265 | | | | - | 270 | | |
| Ser | Ala | Phe 275 | Tyr | Thr | Ile | Val | Thr 280 | Pro | Met | Leu | Asn | Pro 285 | Leu | Ile | Tyr |

Ser Leu Arg Asn Ser Glu Val Lys Gly Ser Leu Arg Lys Cys Val Thr 295 Arg Cys Ala Ala Leu Thr Ser Lys Asp Ala Leu Ala 310 <210> 2489 <211> 315 <212> PRT <213> Mus musculus <400> 2489 Met Gln Asp Phe Leu Trp Arg Asn Arg Ser Ser Leu Thr Glu Phe Val Leu Leu Gly Phe Ser Ser Asn Thr Gln Ile Asn Gly Ile Leu Phe Gly Ile Phe Leu Leu Tyr Leu Thr Thr Leu Leu Gly Asn Gly Leu Ile Ile Thr Leu Ile His Met Asp Ser Arg Leu His Thr Pro Met Tyr Phe 55 Phe Leu Ser Val Leu Ser Ile Leu Asp Met Gly Tyr Val Thr Thr Val Pro Gln Met Leu Val His Leu Val Cys Lys Lys Lys Thr Ile Ser 90 Tyr Val Gly Cys Val Ala Gln Met Tyr Ile Phe Leu Met Leu Gly Ile 100 105 Thr Glu Ser Trp Leu Phe Ala Ile Met Ala Tyr Asp Arg Tyr Val Ala 120 Ile Cys His Pro Leu Arg Tyr Lys Val Ile Met Ser Pro Leu Leu Arg 130 135 140 Gly Ser Leu Val Ala Phe Cys Gly Phe Trp Gly Ile Thr Cys Ala Leu 150 155 Ile Tyr Thr Val Ser Ala Met Ile Leu Pro Tyr Cys Gly Pro Asn Glu 165 170 175 Ile Asn His Phe Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys 180 185 Ala Asp Thr Ser Leu Asn Asp Gln Val Asp Phe Ile Leu Gly Phe Ile 200 Leu Leu Val Pro Leu Ser Leu Ile Ile Val Val Tyr Ile Asn Ile 215 Phe Ala Ala Ile Leu Arg Ile Arg Ser Thr Gln Gly Arg Ile Lys Ala 230 235 Phe Ser Thr Cys Val Ser His Ile Thr Val Val Thr Met Phe Ser Ile 245 250 Pro Cys Met Val Met Tyr Met Arg Pro Gly Ser Glu Ser Ser Pro Glu 265 270 Glu Asp Lys Leu Ala Leu Phe Tyr Asn Val Ile Ser Ala Phe Leu 275 280 Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Arg Ala Phe 295 Leu Lys Val Val Gly Ser Arg Lys Gly Ser Glu

<210> 2490

<211> 312

<212> PRT

<213> Mus musculus

```
10
Thr Ser His Val Glu Leu Gln Ile Leu Phe Phe Val Leu Phe Leu Val
Val Tyr Val Val Thr Val Ala Gly Asn Leu Gly Met Ile Leu Leu Ile
                            40
Lys Ala Asn Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His
Leu Ser Phe Val Asp Met Cys Phe Ser Ser Asn Val Thr Pro Lys Met
                    70
                                         75
Leu Gln Ile Phe Leu Ser Glu Arq Lys Thr Ile Ser Tyr Ser Ala Cys
                                    90
Leu Val Gln Cys Tyr Leu Phe Ile Ala Leu Val His Val Glu Phe Tyr
                                105
Ile Leu Ala Leu Met Ala Phe Asp Arg Tyr Met Ala Ile Cys Asn Pro
                            120
Leu Leu Tyr Gly Ser Lys Met Ser Gln Ser Val Cys Thr Ser Leu Ile
                        135
                                            140
Thr Val Pro Tyr Val Tyr Gly Ala Leu Thr Gly Leu Met Glu Thr Met
                    150
                                         155
Trp Thr Tyr Asn Leu Ala Phe Cys Gly His Asn Glu Ile Asn His Phe
                                    170
                165
Tyr Cys Ala Asp Pro Pro Leu Ile Lys Leu Ala Cys Ser Asp Thr Tyr
                                                     190
            180
                                185
His Lys Glu Thr Ser Met Leu Val Val Ala Gly Phe Asn Leu Ser Phe
        195
Ser Leu Leu Ile Ile Leu Thr Ser Tyr Leu Tyr Ile Phe Pro Ala Ile
                        215
Leu Arg Ile Ser Ser Thr Glu Gly Lys Arg Lys Ala Phe Ser Thr Cys
                    230
                                         235
Gly Ser His Leu Thr Ala Val Ile Ile Phe Tyr Ala Thr Leu Phe Phe
                245
                                    250
Met Tyr Leu Arg Pro Thr Ser Arg Glu Ser Val Glu Gln Gly Lys Met
            260
                                265
                                                     270
Val Ala Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Met Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ile Ser Lys Glu Leu
                        295
Ser His Lys Lys Met Tyr Phe Ser
<210> 2491
<211> 297
<212> PRT
<213> Mus musculus
<400> 2491
Leu Leu Gly Phe Thr Ser Asp Pro Thr Thr Gln Leu Val Leu Phe Val
Met Phe Leu Ile Met Tyr Thr Leu Ser Val Leu Gly Asn Ile Thr Leu
Ile Val Leu Ile Cys Asn Asp Ser Arg Leu His Thr Pro Met Tyr Phe
Phe Ile Gly Asn Leu Ser Phe Leu Asp Leu Trp Leu Ser Asn Val Tyr
                        55
Thr Pro Lys Ile Leu Ala Ile Cys Ile Ser Glu Asn Lys Ser Ile Ser
                                         75
```

Met Thr Arg Asn Phe Thr Ser Val Thr Glu Phe Ile Leu Leu Gly Leu

<400> 2490

```
Phe Ala Ser Cys Val Ala Gln Phe Phe Phe Ser Ala Gly Leu Asp Tyr
                                    90
Ser Glu Cys Tyr Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala
                                105
Ile Ser Lys Pro Leu Ile Tyr Ser Gln Ala Ile Ser Met Lys Leu Cys
                            120
Ala Phe Phe Val Ala Ala Ser Tyr Met Gly Gly Phe Ile Asn Ser Ser
                        135
Ile Ile Thr Lys Lys Thr Phe Thr Phe Asp Phe Cys Asn Asp Asn Val
                    150
Ile Asp Asp Phe Phe Cys Asp Leu Leu Pro Leu Val Asn Leu Ala Cys
                                    170
Gly Gly Lys Glu Gly Tyr Gln Ala Leu Met Tyr Phe Leu Leu Thr Ser
                                185
Asn Val Met Ile Pro Ile Ala Leu Ile Leu Ala Ser Tyr Ile Phe Ile
        195
                            200
Ile Ala Thr Ile Leu Arg Ile Arg Ser Thr Gln Gly Arg Met Lys Ala
                        215
                                            220
Phe Ser Thr Cys Ser Ser His Leu Ile Ser Val Thr Leu Tyr Tyr Gly
                    230
Ser Ile Leu Tyr Ile Tyr Ser Arg Pro Arg Thr Arg Tyr Ser Leu Asp
                                    250
Ser Asp Lys Val Val Ser Thr Phe Tyr Thr Val Val Phe Pro Met Leu
                                265
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Met
                            280
Asn Lys Leu Phe Lys Ile Ile Pro Leu
```

```
<210> 2492
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 2492

Met Gly Pro Ala Asn Lys Ser Gln Leu Ser Pro Ser Thr Phe Trp Leu 10 Met Gly Ile Pro Gly Leu Glu His Leu His Val Trp Ile Gly Ile Pro 25 Phe Cys Ser Met Tyr Met Val Ala Leu Met Gly Asn Val Thr Ile Leu Ala Val Val Arg Ala Glu Arg Thr Leu His Glu Pro Met Phe Leu Phe 55 Leu Cys Met Leu Ser Val Thr Asp Leu Val Leu Ser Thr Ser Thr Leu 70 Pro Arg Met Leu Cys Leu Phe Trp Met Ala Ala His Asp Ile Thr Phe 90 8.5 Asp Ala Cys Leu Ala Gln Met Phe Phe Ile His Ser Phe Thr Ala Met 105 Glu Ser Gly Phe Phe Leu Ala Met Ala Ile Asp Arg Tyr Val Ala Ile 115 120 Cys Asp Pro Leu Arg His Ala Thr Ile Leu Thr His Ser Arg Ile Ala 135 Val Met Gly Ala Val Val Leu Arg Gly Val Gly Phe Phe Ser Pro 150 155 His Pro Ile Leu Leu Lys Gln Leu Pro Tyr Cys Arg Thr Arg Ile Ile 170 Ala His Thr Tyr Cys Glu Phe Met Ala Val Val Lys Leu Ala Cys Leu

```
185
                                                     190
            180
Glu Ile Gly Ala Thr Lys Arg Tyr Ser Leu Gly Val Ala Phe Gly Ile
        195
                            200
Gly Ser Cys Asp Cys Phe Phe Ile Ala Ile Ser Tyr Val Leu Ile Leu
                        215
Arg Ala Val Phe Arg Leu Pro Ser Arg Glu Ala Ser Leu Lys Ala Leu
                    230
                                        235
Gly Thr Cys Gly Ser His Val Cys Val Ile Val Val Phe Tyr Ser Thr
                245
                                    250
Ala Gly Phe Thr Phe Leu Thr His Arg Phe Gly His Ser Val Ala Pro
                                                     270
                                265
Arg Thr His Ile Leu Ile Ala Asn Met Tyr Leu Leu Val Pro Pro Phe
                            280
Leu Asn Pro Ile Val Tyr Gly Val Arg Thr Lys Lys Ile Arg Asp Tyr
                        295
Val Leu Asn Thr Leu Lys Val Lys Gly Ser
                    310
<210> 2493
<211> 310
<212> PRT
<213> Mus musculus
<400> 2493
Met Ala Thr Glu Asn Ala Ser Val Pro Glu Phe Ile Leu Ala Gly Leu
                                    10
1
                 5
Thr Asp Gln Pro Gly Leu Arg Met Pro Leu Phe Phe Leu Phe Leu Gly
                                25
Phe Tyr Met Val Thr Met Val Gly Asn Leu Gly Leu Ile Thr Leu Ile
                            40
Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn
                        55
Leu Ser Leu Ile Asp Phe Cys Tyr Ser Thr Val Ile Thr Pro Lys Met
                    70
Leu Val Ser Phe Val Ser Lys Lys Asn Ile Ile Ser Tyr Ser Gly Cys
                85
                                    90
Met Thr Gln Leu Phe Phe Phe Leu Phe Phe Val Val Ser Glu Ser Phe
            100
                                105
Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
        115
                            120
Leu Met Tyr Thr Val Thr Met Ser Pro Gln Val Cys Leu Leu Leu Leu
                        135
                                            140
Leu Gly Val Tyr Val Met Gly Phe Ala Gly Ala Met Ala His Thr Ala
                    150
Phe Met Val Lys Leu Thr Phe Cys Ala Asp Lys Leu Val Asn His Tyr
                165
                                    170
Met Cys Asp Ile Leu Pro Leu Leu Glu Arg Ser Cys Thr Ser Thr Tyr
                                185
Val Asn Glu Leu Val Val Phe Ile Val Val Gly Ile Asp Ile Gly Val
        195
                            200
                                                 205
Pro Thr Val Thr Ile Phe Ile Ser Tyr Ala Leu Ile Leu Ser Ser Ile
                        215
                                             220
Leu Arg Ile Ser Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                    230
                                         235
Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Gly Ala Phe
                245
                                    250
Met Tyr Leu Lys Pro Ser Ser Leu Leu Pro Met Asn Gln Gly Lys Val
                                                     270
            260
                                265
```

Ser Ser Leu Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Lys Thr Leu 295 Ser Arg Ser Ser Phe Ser <210> 2494 <211> 314 <212> PRT <213> Mus musculus <400> 2494 Met Phe Gln Ile Leu Arg Asp Ser Ser Ser Ser Arg Phe Gln Val Ser 1 Glu Phe Ile Leu Met Gly Phe Pro Gly Ile His Ser Trp Gln His Trp 25 Leu Ser Leu Pro Leu Ala Leu Leu Tyr Val Leu Ala Leu Ile Ala Asn 40 Ile Leu Ile Val Thr Phe Ile Tyr Gln Glu Ala Ser Leu His Gln Pro Met Tyr His Phe Leu Gly Ile Leu Ala Ile Val Asp Met Gly Leu Ala Thr Thr Ile Met Pro Lys Ile Leu Ala Ile Leu Trp Phe Asn Ala Lys Ala Ile Ser Phe Asn Glu Cys Phe Ala Gln Met Tyr Ala Ile His Cys 105 Phe Val Ala Met Glu Ser Asp Ile Phe Val Cys Met Ala Ile Asp Arg 120 Tyr Val Ala Ile Arg Arg Pro Leu Arg Tyr Ser Ser Ile Val Thr Glu 135 Ser Phe Val Val Lys Ala Thr Val Ile Met Ala Phe Arg Asn Phe Val 150 155 Ala Pro Met Ser Val Pro Val Leu Ala Ala Gln Arg Asn Tyr Cys Ser 165 170 175 Arg Asn Gln Ile Asn His Cys Phe Cys Pro Asn Pro Gly Val Thr Ser 185 190 Leu Ala Cys Asp Asp Arg Lys Ile Asp Ser Ile Asn Gln Leu Phe Leu 195 200 Ala Trp Ala Val Met Gly Ser Asp Leu Gly Leu Ile Ile Val Ser Tyr 215 Ala Leu Ile Leu Pro Ser Val Leu Arg Leu Asn Ser Pro Lys Ala Ala 230 Ser Gln Thr Leu Ser Thr Cys Thr Ser His Leu Ile Leu Ile Phe Phe 250 Phe Tyr Thr Val Ile Ile Val Met Pro Ile Thr His Ser Ala Lys Met Thr Val Pro Val Ile Leu Leu Leu Asn Val Pro His Asn Val Ile 280 Pro Pro Ala Leu Asn Pro Met Val Tyr Ala Leu Lys Asn Lys Glu Leu 295 300 Lys Glu Gly Phe Tyr Leu Cys Ser Gly Trp 305 310 <210> 2495

<211> 319

<212> PRT

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<400> 2495
Met Ser Ala Ser Leu Lys Ala Phe Asn Ser Ser Lys Ser Gln Val Ser
Glu Phe Ile Leu Leu Gly Phe Pro Gly Ile His Ser Trp Gln His Trp
                                25
Leu Ser Leu Pro Phe Thr Leu Leu Tyr Leu Ser Ala Ile Gly Thr Asn
Val Leu Ile Leu Ile Ile Cys Gln Asp Pro Ser Leu Lys Gln Pro
Met Tyr Leu Phe Leu Gly Ile Leu Ser Val Val Asp Met Gly Leu Ala
Thr Thr Ile Met Pro Lys Ile Leu Ala Ile Phe Trp Phe Asp Ala Lys
Val Ile Ser Leu Pro Glu Cys Phe Ala Gln Ile Tyr Ala Ile His Cys
Phe Val Gly Met Glu Ser Gly Ile Phe Leu Cys Met Ala Phe Asp Arg
        115
                            120
                                                 125
Tyr Val Ala Ile Cys Tyr Pro Leu Arg Tyr Ser Ser Ile Ile Thr Asn
                        135
                                            140
Ser Leu Ile Leu Lys Ala Thr Leu Phe Met Val Leu Arg Asn Gly Leu
                    150
                                        155
Cys Val Ile Pro Val Pro Val Leu Ala Ala Gln Arg Asn Tyr Cys Ser
                165
                                    170
                                                         175
Arg Asn Glu Ile Asp His Cys Leu Cys Ser Asn Leu Gly Val Thr Ser
            180
                                185
                                                    190
Leu Ala Cys Asp Asp Arg Arg Pro Asn Ser Ile Cys Gln Leu Ile Leu
        195
                            200
Ala Trp Val Gly Met Gly Ser Asp Leu Gly Leu Ile Ile Leu Ser Tyr
                        215
                                            220
Thr Leu Ile Leu Arg Ser Val Leu Arg Leu Asn Ser Ala Glu Ala Val
                    230
                                        235
Ser Lys Ala Leu Asn Thr Cys Ser Ser His Leu Ile Leu Ile Leu Phe
                245
                                    250
Phe Tyr Thr Val Val Val Ile Ser Val Thr His Leu Ser Glu Thr
                                265
                                                     270
Lys Ala Thr Leu Ile Pro Val Leu Leu Asn Val Met His Asn Ile Thr
                            280
Pro Pro Ser Leu Asn Pro Ile Val Tyr Ala Leu Arg Thr Arg Gln Leu
                        295
                                            300
Arg Gln Gly Phe Gln Lys Val Leu Cys Arg Ser Leu Gln Glu Lys
<210> 2496
<211> 314
<212> PRT
<213> Mus musculus
<400> 2496
Met Ala Phe Leu Glu Asp Gly Asn His Thr Val Val Thr Glu Phe Ile
Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Val Ile Leu Phe Ile
Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr
                            40
Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe
```

```
Phe Leu Ser His Leu Ala Ser Ile Asp Ile Ala Ile Ser Ser Ser Val
Thr Pro Asn Met Val Val Asn Phe Leu Val Glu Arg Ser Ser Ile Ser
                                    90
Tyr Ile Gly Cys Gly Ile Gln Leu Gly Ser Ala Val Phe Phe Gly Ala
                                105
Ile Glu Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala
                                                125
                            120
Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Lys Gln Val Cys
                                            140
Ile Gln Leu Leu Val Gly Ser Tyr Ile Gly Gly Phe Ile His Ala Ser
                    150
                                        155
Phe Phe Thr Leu Ser Phe Val Ser Phe Leu Phe Cys Gly Pro Asn Arg
                                    170
Ile Asn His Phe Phe Cys Asp Phe Thr Pro Leu Val Glu Leu Ser Cys
           180
Ser Asp Asn Ser Val Leu Ile Ile Leu Asp Ser Phe Ser Thr Gly Thr
                            200
Ile Ile Val Ile Thr Val Phe Val Ile Ala Ile Ser Tyr Thr Cys Ile
                        215
Leu Ile Thr Ile Leu Lys Met His Ser Thr Glu Gly Arg His Lys Ala
                    230
Phe Ser Thr Cys Thr Ser His Leu Thr Val Val Thr Leu Leu Tyr Gly
                245
                                    250
Thr Val Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Asp
                                                    270
Gln Asn Lys Val Ile Ser Val Phe Tyr Met Val Val Ile Pro Met Leu
        275
                            280
Asn Pro Ile Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu
                        295
Lys Lys Gln Leu Gly Glu Lys Asn Ile Phe
                    310
```

<210> 2497

<211> 314

<212> PRT

<213> Mus musculus

<400> 2497

Met Ala Phe Leu His Asn Gly Asn His Thr Ala Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp Asp Pro Val Phe Arg Val Ile Leu Phe Thr 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Ser Val Asp Ile Gly Tyr Ser Ser Ser Val 70 Thr Pro Asn Met Leu Ala Asn Phe Leu Val Glu Lys Asn Thr Ile Ser 90 Tyr Leu Gly Cys Thr Ile Gln Leu Ser Leu Ala Ala Phe Cys Gly Thr 100 105 110 Val Glu Cys Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Met Ala 115 120 125 Ile Cys Ser Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys 135 140 Ile Gln Leu Ile Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser

```
150
                                        155
145
Ser Phe Thr Leu Phe Phe Leu Ser Phe Leu Phe Cys Gly Pro Asn Arg
                                    170
Ile Asn His Phe Tyr Cys Asp Phe Ala Pro Leu Val Ala Leu Ser Cys
                                185
                                                    190
Ser Asp Val Ser Val Ser Glu Val Val Thr Ser Phe Phe Ser Gly Ser
                            200
Val Thr Met Ile Thr Met Leu Val Ile Ala Ile Ser Tyr Thr Tyr Ile
                        215
                                            220
Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg His Lys Ala
                                        235
                    230
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly
                                    250
Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Phe Ser Thr Asp
Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu
        275
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Asp Ala Leu
                        295
Lys Arg His Leu Gly Lys Lys Ile Phe Ser
                    310
<210> 2498
<211> 308
<212> PRT
<213> Mus musculus
<400> 2498
Met Arg Asn Ile Thr Glu Ala Thr Phe Phe Val Leu Lys Gly Leu Thr
Asp Asn Asn Glu Leu Gln Ile Ile Leu Phe Leu Phe Leu Ala Ile
                                25
            20
Tyr Ile Phe Thr Leu Ile Gly Asn Val Gly Leu Ile Ile Leu Val Val
                            40
Gly Asp Ser Gln Leu His Asn Pro Met Tyr Cys Phe Leu Ser Val Leu
Ser Ser Val Asp Ala Cys Tyr Ser Thr Asp Ile Thr Pro Asn Met Leu
                    70
                                        75
Val Gly Phe Met Ser Lys Ser Lys Ile Ile Ser Phe Tyr Gly Cys Ala
                                    90
Thr Gln Met Phe Leu Ala Val Thr Phe Gly Thr Thr Glu Cys Phe Leu
            100
                                105
                                                    110
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile His Asp Pro Leu
                            120
                                                125
Leu Tyr Ala Val Ser Met Ser Pro Arg Val Tyr Ile Pro Leu Ile Ile
                        135
                                            140
Ala Ser Tyr Ala Gly Gly Ile Val His Ala Ile Ile His Thr Val Ala
```

Thr Phe Ser Leu Ser Phe Cys Arg Ser Asn Glu Val Lys His Ile Phe

Cys Asp Ile Pro Pro Leu Leu Ala Ile Ser Cys Ser Glu Thr Tyr Val

Asn Glu Leu Leu Phe Phe Phe Val Ser Phe Ile Glu Leu Val Thr
195
200
205
Ile Leu Ile Val Leu Val Ser Tyr Ala Phe Ile Leu Leu Ser Ile Leu

Lys Met Asn Ser Ser Glu Gly Arg Arg Lys Val Phe Ser Thr Cys Gly

185

155

235

220

190

170

150

165

```
Ala His Leu Thr Ala Val Ser Ile Tyr Tyr Gly Thr Ile Leu Phe Met
                245
                                    250
Tyr Val Arg Pro Ser Ser Asn Tyr Ser Leu Glu His Asp Met Ile Val
            260
                                265
                                                     270
Ser Thr Phe Tyr Thr Ile Gly Ile Pro Met Leu Asn Pro Ile Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Met Lys Arg Val Leu Arg
                        295
                                             300
Lys Lys Ile Asn
305
<210> 2499
<211> 315
<212> PRT
<213> Mus musculus
<400> 2499
Met Trp Met Ile Pro Gly Gln Asn Gln Ser Trp Val Ser Glu Phe Ile
Leu Ile Gly Phe Ser Ser Asp Pro Thr Thr Asn Ser Ile Leu Phe Ile
            20
                                25
Val Phe Leu Leu Met Tyr Leu Ser Ser Val Leu Gly Asn Gly Leu Ile
                            40
Ile Met Leu Val Cys Leu Asp Thr Gln Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Cys Thr Leu Ser Leu Leu Asp Met Gly Tyr Val Thr Thr
                    70
                                        75
Met Pro Gln Met Leu Val His Leu Leu Ala His Ser Gln Thr Ile Ser
                                    90
Phe Ala Gly Cys Trp Leu Gln Met Tyr Val Phe Gly Ala Leu Gly Met
                                105
Thr Glu Cys Thr Phe Phe Val Val Met Ala Tyr His Arg Tyr Val Ala
                            120
Ile Cys Tyr Pro Leu Arg Tyr Thr Val Ile Leu Asn Trp Gly Leu Cys
   130
                        135
                                            140
Ile Arg Leu Ala Gly Gly Ser Trp Ile Cys Gly Leu Phe Ser Ser Leu
                    150
                                        155
Leu His Thr Phe Phe Thr Met Ser Leu Pro Tyr Cys Gly Pro Asn Arg
                165
                                    170
Ile Asn His Tyr Phe Cys Glu Gly Pro Ser Val Arg Ser Leu Ala Cys
            180
                                185
                                                     190
Met Asp Thr His Val Ile Glu Met Val Asp Phe Val Leu Ser Val Phe
        195
                            200
Val Val Val Ile Pro Ile Ser Leu Ile Val Ala Ser Tyr Ile Gly Ile
    210
                        215
Ala Met Ala Ile Leu Lys Ile Lys Ser Asn Gln Gly Arg Cys Lys Ala
                    230
                                        235
Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Thr Phe Phe Tyr Ala
                245
                                    250
                                                         255
Pro Ala Ser Tyr Ile Tyr Met Arg Pro Asn Ser Ser Tyr Ser Pro Glu
            260
                                265
                                                    270
Arg Asp Lys Gln Ile Ser Leu Phe Tyr Asn Val Phe Thr Ala Leu Leu
        275
                            280
                                                285
Asn Pro Val Val Tyr Ser Leu Arg Asn Lys Asp Ile Lys Arg Ala Phe
                        295
                                            300
Leu Lys Val Met Gly His Gly Arg Leu Ala Trp
                    310
                                        315
```

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<210> 2500
<211> 327
<212> PRT
<213> Mus musculus
<400> 2500
Met Glu Arg Glu Asn Gln Thr Gly Glu Arg Asn Phe Leu Leu Gly
                                    10
Phe Thr Glu Asp Ser Asp Leu Gln Ser Phe Phe Gly Leu Leu Leu
                                25
                                                     30
Ser Met Tyr Leu Val Thr Ile Thr Gly Asn Leu Leu Ile Ile Val Ala
        35
                            40
Ile Ile Ser Asp Pro His Leu His Met Pro Met Tyr Leu Phe Leu Ser
                                            60
Asn Leu Ser Ile Ala Asp Ile Gly Phe Thr Ser Thr Thr Ile Pro Lys
                    70
                                        75
                                                             80
Val Leu Gln Asn Ile Arg Thr Gln Ser Lys Phe Ile Ser Phe Ser Gly
                                    90
Cys Ile Thr Gln Ile Phe Phe Phe Ile Val Phe Gly Cys Leu Asp Asn
                                105
                                                     110
Leu Leu Leu Ser Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
                            120
Pro Leu His Tyr Val Val Ile Met Asn Ser Cys Phe Cys Ala Met Leu
                        135
                                            140
Ala Leu Gly Ser Trp Ile Val Ser Val Met Ser Ser Leu Pro Glu Thr
                    150
                                        155
Leu Thr Val Leu Arg Leu Ser Phe Cys Thr Asn Met Glu Ile Pro His
                                    170
                                                         175
Phe Phe Cys Asp Leu Pro Glu Val Leu Lys Leu Ala Cys Ser Asp Thr
            180
                                185
                                                     190
Leu Val Asn Asn Ile Val Thr Tyr Ser Ile Thr Ile Val Ile Ala Gly
                            200
        195
Phe Pro Phe Ser Gly Ile Leu Leu Ser Tyr Ser Lys Ile Phe Ser Ser
                        215
                                            220
Ile Leu Arg Ile Pro Ser Ala Gly Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Leu Val Val Phe Leu Phe Tyr Ser Asn Gly Leu
                245
                                    250
                                                         255
Gly Val Tyr Leu Ser Ser Ala Ala Thr Ser Ser Ser Arg Met Ser Leu
            260
                                265
                                                     270
Val Ala Ser Leu Met Tyr Ser Ile Val Thr Pro Met Leu Asn Pro Phe
        275
                            280
                                                 285
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Phe Ile Tyr Ser Leu Arg Ile Ser
                        295
                                            300
Cys Ile His Thr Asn Met Ile Ile Asn Lys Lys Ser Gln Lys Phe Lys
305
                    310
                                        315
                                                             320
Arg Asp Thr Gly Thr Asn Cys
                325
<210> 2501
<211> 317
<212> PRT
<213> Mus musculus
<220>
<221> CONFLICT
<222> (10)...(17)
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<400> 2501

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Ser Met Ile Ile Trp Val Cys Leu Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa
Xaa Lys Val Gln Leu Pro Leu Phe Leu Leu Phe Val Ala Ile Tyr Leu
Ile Thr Val Ala Gly Asn Leu Gly Met Ile Ala Leu Ile Gly Ile Ser
                            40
Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Ser Ser Leu Ser Phe
                        55
Ile Asp Phe Cys Gln Ser Thr Val Val Thr Pro Lys Met Leu Val Ser
Leu Leu Thr Lys Lys Asn Ile Ile Ser Tyr Ser Gly Cys Met Val Gln
                                     90
                85
Leu Tyr Phe Phe Ile Ser Phe Gly Thr Ala Glu Cys Tyr Thr Leu Ala
            100
                                105
Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr
                            120
Asn Val Thr Met Ser Tyr Gln Ile Tyr Ser Ser Leu Ile Ser Gly Val
                        135
Tyr Ile Tyr Ala Val Phe Cys Ala Ser Val Asn Thr Gly Phe Ile Ile
                    150
                                         155
Arg Ile Gln Phe Cys Lys Leu Asn Val Ile Asn His Tyr Phe Cys Asp
                165
                                     170
                                                         175
Leu Leu Pro Leu Leu Lys Leu Ala Cys Ser Asn Thr Tyr Ile Asn Glu
                                185
                                                     190
Ile Leu Ile Leu Phe Phe Gly Ser Val Asn Ile Cys Val Pro Met Leu
        195
                            200
Thr Val Ile Thr Ser Tyr Ile Phe Ile Ile Ala Ser Ile Leu Arg Ile
                        215
                                             220
Arg Ser Ser Glu Gly Lys Phe Lys Ala Phe Ser Thr Cys Ser Ser His
                    230
                                         235
Ile Ser Ala Val Ala Ile Leu Tyr Gly Ser Thr Ala Phe Thr Tyr Leu
                                    250
Gln Pro Ser Ser Val Ser Leu Val Asp Gln Gly Lys Val Ser Ser Val
                                265
Phe Tyr Thr Thr Val Val Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu
                            280
Arg Asn Lys Asp Val Thr Leu Ala Leu Lys Arg Ile Leu Glu Gln Lys
Arg Leu Tyr Val Ser Arg Ser Arg Val Lys Ile Ile Asn
                    310
<210> 2502
<211> 286
<212> PRT
<213> Mus musculus
<400> 2502
Leu Pro Leu Phe Val Leu Phe Leu Met Asn Tyr Thr Ala Thr Val Met
1
                                    10
Gly Asn Leu Ser Leu Met Ser Leu Ile Cys Leu Asn Ser Asn Leu His
            20
Thr Pro Met Tyr Phe Phe Ile Phe Asn Leu Ser Phe Ile Asp Phe Cys
                            40
Tyr Ser Leu Val Ser Thr Pro Lys Met Leu Met Ser Phe Leu Leu Glu
                        55
```

```
Lys Asn Thr Ile Ser Phe Arg Gly Cys Met Thr Gln Leu Phe Phe Tyr
Cys Val Phe Val Asn Ser Glu Ser Tyr Val Leu Thr Ala Met Ala Tyr
Asp Arg Tyr Val Ala Ile Cys Gln Pro Leu Met Tyr Lys Ile Ile Met
Ser Pro Lys Ile Cys Cys Leu Leu Ile Phe Gly Ser Phe Leu Met Gly
                            120
Phe Val Ser Ala Ile Ile His Thr Gly Cys Met Val Arg Leu Ser Phe
                        135
Cys His Ser Lys Ile Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu
                                        155
                    150
Leu Gln Leu Ser Cys Ser Ser Thr Tyr Val Asn Glu Leu Met Ser Tyr
                165
                                    170
Val Val Val Gly Thr Ser Ile Ile Leu Cys Cys Leu Ile Ile Leu Ile
            180
                                185
Ser Tyr Ala Met Ile Leu Phe Ser Ile Ile His Met Ser Ser Gly Lys
                            200
Gly Trp Ser Lys Ala Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val
                        215
                                            220
Ser Leu Phe Tyr Gly Ser Gly Leu Leu Ala Tyr Val Asn Pro Ser Ser
                    230
                                        235
Ala Glu Thr Val Gly Gln Ala Lys Phe Phe Ser Val Phe Tyr Thr Leu
                245
                                    250
Leu Val Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp
                                265
Val Lys Leu Ala Val Lys Lys Thr Trp Lys Arg Ile Thr Ser
                            280
```

```
<210> 2503
```

<400> 2503

Met Ala Phe Leu Glu Asp Gly Asn His Thr Thr Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Asp Ile Leu Phe Ile 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 55 Ile Leu Ser His Leu Ala Ser Val Asp Ile Gly Ile Ser Ser Val 70 Thr Pro Asn Met Leu Ala Thr Phe Leu Val Lys Gln Asn Thr Ile Ser 90 Tyr Ile Gly Cys Ser Ile Gln Phe Thr Ser Ala Ala Phe Phe Gly Thr 100 105 Val Glu Cys Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Val Ala 120 125 Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Glu Ala Cys 130 135 140 Ile Gln Leu Val Val Gly Ser Tyr Ile Gln Gly Phe Leu Asn Ala Ser 150 155 Phe Phe Thr Leu Ser Phe Phe Ser Leu Phe Phe Cys Gly Pro Asn Arg 170 Ile Asn Asp Phe Tyr Cys Asp Phe Ala Pro Leu Leu Glu Leu Ser Cys

<211> 330

<212> PRT

<213> Mus musculus

```
185
            180
Ser Asp Val Thr Val Ala Val Val Ile Thr Ser Ile Ser Ala Gly Phe
                            200
                                                205
       195
Ile Thr Leu Thr Thr Val Phe Val Ile Ala Ile Ser Tyr Ser Cys Ile
                                            220
                        215
Phe Ile Thr Ile Met Lys Met His Ser Thr Glu Ser Arg Cys Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Ile Leu Phe Tyr Gly
                245
                                    250
                                                        255
Thr Ala Ile Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Asp
                                                    270
                                265
Gln Asn Lys Val Leu Ser Ile Phe Tyr Thr Val Val Ile Pro Met Leu
        275
                            280
                                                285
Asn Pro Leu Ile Tyr Ser Leu Arq Asn Asn Glu Ile Lys Glu Ala Leu
                        295
                                            300
Lys Arg His Leu Gly Lys Lys Val Phe Ser Tyr Gly Asn Leu Phe Cys
                    310
                                        315
                                                             320
Lys Thr His Tyr Asn His Asn Tyr Pro Val
                325
<210> 2504
<211> 317
<212> PRT
<213> Mus musculus
<400> 2504
Met Thr Glu Arg Met Ser Leu Tyr Asn Val Thr Glu Val His Pro Ser
                                                        15
Ser Phe Leu Leu Gly Ile Pro Gly Leu Glu Asn Ala His Ile Trp
                                25
Ile Gly Phe Pro Phe Cys Leu Leu Tyr Leu Ile Ala Val Leu Gly Asn
Gly Ala Val Leu Phe Val Ile Gln Ala Glu His Ser Leu His Glu Pro
                        55
Met Tyr Tyr Phe Leu Ala Met Leu Asp Ser Ile Asp Leu Gly Leu Thr
                    70
                                        75
Thr Ala Thr Ile Pro Lys Met Leu Gly Ile Phe Trp Phe Asn Leu Arg
                                    90
Glu Ile Ser Phe Gly Gly Cys Leu Ser Gln Met Phe Phe Ile His Phe
                                105
                                                     110
Phe Thr Ala Met Glu Ser Ile Met Leu Leu Ala Met Gly Phe Asp Arg
```

Tyr Ile Ala Ile Cys Lys Pro Leu Gln Tyr Thr Val Ile Leu Thr Asn

Lys Val Ile Gly Val Ile Ala Gly Ile Ala Val Leu Arg Ser Leu Tyr

Met Val Leu Pro Leu Val Phe Leu Leu Arg Leu Pro Tyr Cys Gly

His Gln Ser Ile Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Arg

Leu Ala Cys Ala Ser Ile Lys Val Asn Ile Met Phe Gly Leu Ser Asn

Arg Ile Leu Tyr Ala Val Phe Cys Leu Pro Ser Arg Glu Ala Arg Leu

Lys Ala Leu Asn Thr Cys Gly Ser His Ile Gly Val Ile Leu Thr Phe

Ile Ala Leu Leu Leu Asp Val Val Leu Ile Ile Leu Ser Tyr Val

 Phe
 Thr
 Pro
 Ala
 Phe
 Phe
 Ser
 Phe
 Leu
 Thr
 His
 Arg
 Phe
 Gly
 His
 Asn

 Val
 Pro
 Gln
 Tyr
 Ile
 His
 Ile
 Phe
 Leu
 Ala
 Asn
 Leu
 Tyr
 Val
 Val
 Val

 Pro
 Pro
 Ala
 Leu
 Asn
 Pro
 Val
 Ile
 Tyr
 Gly
 Val
 Arg
 Thr
 Lys
 Gln
 Ile

 Arg
 Glu
 Gln
 Val
 Met
 Arg
 Ile
 Leu
 Phe
 Arg
 Lys
 Asp
 His

 305
 310
 315
 315

<210> 2505 <211> 333 <212> PRT <213> Mus musculus

<400> 2505

Met Thr Pro Leu Leu Tyr Phe Ala Pro Leu Arg Ala Ala Arg Gly Ser Thr Ala Ala Thr Arg Gly Gln Asn Asp Ser Ser Val Ala Glu Phe Ile Leu Leu Gly Phe Ser Ala Phe Pro Glu Leu Gln Gly Gln Met Phe Gly Ala Phe Leu Val Ile Tyr Leu Val Thr Leu Met Gly Asn Ala Thr Ile Val Ala Val Ile Leu Leu Asp Gln Ser Leu His Ile Pro Met Tyr Leu Phe Leu Gln Asn Leu Ser Val Val Glu Met Ser Phe Ser Ala Ala Ile Thr Pro Glu Met Leu Val Val Leu Thr Ser Glu Lys Ala Thr Ile Ser 100 105 Phe Gly Gly Cys Phe Ala Gln Met Tyr Phe Ile Leu Leu Phe Gly Gly 120 Thr Glu Cys Phe Leu Leu Gly Ala Met Ala Tyr Asp Arg Phe Ala Ala 135 140 Ile Cys His Pro Leu Ser Tyr Pro Met Ile Met Asn Lys Arg Val Phe 150 155 Val Lys Leu Val Ile Phe Ser Trp Val Ser Gly Ile Met Val Ala Thr 165 170 Val Gln Thr Thr Trp Val Phe Ser Phe Pro Tyr Cys Asp His Lys Glu 180 185 190 Ile Asn His Leu Phe Cys Glu Thr Pro Pro Val Leu Glu Leu Ala Cys 200 Ala Asp Thr Phe Leu Phe Glu Val Tyr Ala Phe Thr Gly Thr Ile Leu 215 Ile Val Met Val Pro Phe Leu Leu Ile Leu Leu Ser Tyr Thr Arg Ile 230 235 Leu Phe Ser Ile Leu Arg Met Pro Ser Thr Thr Gly Arg Gln Lys Ala 250 Phe Ser Thr Cys Ala Ser His Leu Thr Ser Val Thr Leu Phe Tyr Gly 265 Thr Ala Ser Ile Thr Tyr Leu Gln Pro Lys Ser Arg Tyr Ser Pro Asp 280 Thr Lys Lys Leu Met Ser Leu Ala Tyr Thr Leu Leu Thr Pro Leu Leu 290 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Met Lys Arg Ala Val 310 315 Leu Lys Leu Trp Gln Arg Lys Val Ala Leu His Arg Gly 325 330

```
<210> 2506
<211> 309
<212> PRT
<213> Mus musculus
<400> 2506
His Ser Ser Thr Val Glu Phe Ile Leu Leu Gly Phe Ser Asn Tyr Pro
                                     10
Glu Leu Gln Gly Gln Met Phe Gly Ala Phe Leu Val Ile Tyr Leu Val
            20
                                 25
Thr Val Leu Gly Asn Ala Ile Ile Ile Thr Ile Ile Phe Leu Asp Gln
Ser Leu His Ile Pro Met Tyr Leu Phe Leu Gln Asn Leu Ser Leu Val
                         55
Asp Phe Cys Phe Ser Thr Val Ile Thr Pro Glu Ile Leu Val Ile Leu
                    70
65
Thr Ser Glu Lys Ala Thr Ile Ser Phe Gly Gly Cys Phe Val Gln Met
                                     90
Tyr Phe Ile Leu Leu Phe Gly Ala Thr Glu Cys Phe Leu Leu Gly Ala
                                 105
Met Ala Tyr Asp Arg Phe Ala Ala Ile Cys His Pro Leu Thr Tyr Pro
                             120
        115
                                                 125
Val Ile Met Ser Lys Arg Thr Phe Val Lys Leu Val Met Cys Pro Trp
                        135
                                             140
Val Leu Ser Ile Met Thr Ala Val Leu Ser Val Thr Trp Val Ala Ser
                                         155
Phe Pro Tyr Cys Asp His Lys Glu Ile Asn His Leu Phe Cys Glu Ile
                                     170
Pro Pro Val Leu Glu Leu Ala Cys Ala Asp Thr Phe Leu Phe Glu Val
                                 185
Tyr Ala Phe Thr Ser Thr Ile Leu Ile Val Met Val Pro Phe Leu Leu
                             200
Ile Leu Leu Ser Tyr Thr Arg Ile Leu Phe Ser Ile Leu Lys Met Pro
                        215
                                             220
Ser Thr Thr Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala Ser His Leu
                    230
Thr Ser Val Ile Leu Phe Tyr Gly Thr Ala Ser Ile Thr Tyr Leu Gln
                                     250
Pro Lys Ser Gly Tyr Ser Pro Asp Thr Lys Lys Leu Met Ser Leu Ala
            260
                                                     270
Tyr Thr Leu Leu Thr Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg
                             280
Asn Lys Glu Met Lys Arg Ala Val Val Lys Leu Trp Gln Arg Lys Val
    290
                                             300
Thr Leu His Thr Gly
305
<210> 2507
<211> 321
<212> PRT
<213> Mus musculus
<400> 2507
Met Gly Phe Ser Asn Trp Thr Thr Ala Gln Glu Phe Ile Phe Ser Ala
                 5
                                     10
Phe Pro Cys Ser Trp Gly Asp Ser Val Ile Cys Phe Ile Pro Leu Leu
            20
                                                     30
                                 25
```

```
Phe Ile Tyr Ala Phe Ile Ile Val Gly Asn Leu Val Ile Ile Thr Val
Val Gln Leu Asn Ala His Leu His Thr Pro Met Tyr Phe Phe Ile Ser
                        55
                                            60
Ala Leu Ser Phe Leu Glu Ile Trp Tyr Thr Thr Ala Thr Ile Pro Lys
                    70
Met Leu Ser Ser Leu Leu Ser Glu Arg Arg Ser Ile Thr Leu Asn Gly
                                    90
Cys Val Leu Gln Met Tyr Phe Phe His Ser Thr Gly Ile Ser Glu Val
                                105
Cys Leu Leu Thr Ala Met Ala Phe Asp Arg Tyr Leu Ala Ile Cys Ser
                            120
Pro Leu His Tyr Pro Thr Ile Met Thr Ser Arg Leu Cys Ala Gln Leu
                        135
                                            140
Thr Leu Gly Cys Cys Val Cys Gly Phe Leu Thr Pro Leu Pro Glu Ile
                    150
                                        155
Ala Trp Ile Ser Thr Leu Pro Phe Cys Gly Ser Asn His Leu Glu His
                                    170
Ile Phe Cys Asp Phe Leu Pro Val Leu Arg Leu Ala Cys Thr Asp Thr
                                185
His Thr Ile Val Met Ile Gln Val Val Asp Ile Val His Ala Val Glu
                            200
Ile Ile Thr Ala Val Met Leu Ile Phe Met Ser Tyr Val Gly Ile Val
                        215
                                            220
Ala Val Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe
                    230
                                        235
Ser Thr Cys Val Ser His Leu Thr Val Phe Leu Leu Phe Phe Gly Ser
                245
                                    250
                                                         255
Val Ala Leu Met Tyr Leu Arg Phe Ser Ala Thr Tyr Ser Leu Phe Trp
                                265
Asp Thr Ala Ile Ala Leu Ala Phe Ala Val Leu Ser Pro Phe Phe Asn
                            280
Pro Ile Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Glu Ala Ile Lys
                        295
                                            300
Lys His Ile Gly Gln Ala Gly Ile Leu Ile Gly Lys Ser Arg Asn Leu
305
                    310
                                        315
Pro
```

```
<210> 2508
<211> 315
<212> PRT
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<213> Mus musculus

<400> 2508

 Met His Ser Arg Gly Trp Arg Asn His Ser Ser Val Thr Glu Phe Ile

 1
 5
 8
 10
 10
 15
 15

 Leu Leu Gly Phe Ser Arg Asn Pro 20
 25
 10
 10
 10
 10
 15
 16
 15

 Leu Leu Leu Gly Phe Ser Arg Asn Pro 20
 25
 25
 30
 11e
 11e

```
100
                                105
Thr Glu Thr Trp Ile Phe Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala
                            120
                                                125
Ile Cys Tyr Pro Leu His Tyr Gly Val Lys Met Ser Gln Thr Leu Cys
                        135
Ile Ala Leu Val Val Ser Ser Ala Leu Cys Gly Leu Ile Cys Ala Leu
                    150
                                        155
Val Tyr Thr Val Phe Ala Met Asn Leu Pro Tyr Cys Gly Pro Asn Glu
                165
                                    170
Ile Asn His Phe Phe Cys Glu Ile Pro Ala Val Leu Lys Leu Ala Cys
                                185
                                                    190
            180
Ala Asp Thr Ser Leu Asn Asp Gln Val Asp Phe Ile Leu Gly Phe Ile
        195
                            200
Leu Leu Ile Pro Leu Ser Leu Ile Leu Ala Ser Tyr Val Arg Ile
                                             220
                        215
Phe Ile Ala Ile Leu Arg Ile Arg Ser Thr Gln Gly Arg Met Lys Ala
                                        235
                    230
Phe Ser Thr Cys Ala Ser His Ile Thr Val Val Thr Met Phe Cys Val
                                    250
                                                         255
                245
Pro Cys Met Val Met Tyr Met Arg Pro Gly Ser Glu Ala Ser Pro Glu
                                265
                                                     270
Asp Asp Lys Lys Leu Ala Leu Phe Tyr Asn Val Ile Ser Ala Phe Leu
                            280
Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Lys Ala Phe
                        295
                                             300
Phe Lys Leu Ile Gly Arg Gly Glu Asp Thr Gln
                    310
<210> 2509
```

<211> 314 <212> PRT <213> Mus musculus

<400> 2509

Met Ser Tyr Leu Glu Asn Ser Thr Lys Val Thr Thr Phe Ile Leu Leu Gly Leu Thr Asp Ile Pro Glu Leu Gln Val Pro Leu Phe Val Thr Phe Ser Leu Ile Tyr Leu Ile Thr Leu Ile Gly Asn Leu Gly Ile Ile Val Leu Ile Trp Leu Asp Phe Arg Leu His Thr Pro Met Tyr Ile Phe Leu Ser His Leu Ser Leu Ala Asp Cys Val Tyr Ser Ser Ala Val Thr Pro Lys Val Met Val Gly Phe Leu Thr Gly Asp Lys Val Ile Ser Tyr Gly Gly Cys Val Ala Gln Met Phe Phe Phe Val Ala Phe Ala Ser Val Asp Cys Phe Leu Leu Ala Val Met Ala Phe Asp Arg His Ala Ala Val Cys Lys Pro Leu His Tyr Thr Thr Thr Met Thr Thr Ser Val Cys Ala Arg Met Val Ile Ala Cys Tyr Ser Trp Gly Leu Phe Glu Ser Ala Ile His Thr Gly Phe Thr Phe Ser Leu Pro Tyr Cys Ala Asn Val Val His His Phe Phe Cys Asp Ile Pro Pro Ile Leu Ala Leu Ser Cys Ser Asp Ile

```
Tyr Val Asn Glu Ile Val Leu Phe Ile Leu Ala Ser Phe Asn Val Phe
                            200
Phe Ala Leu Ile Val Ile Leu Thr Ser Tyr Ala Phe Ile Phe Ile Ala
                        215
                                            220
Ile Leu Arg Met His Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Val Ile
                245
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Ser His Ser Met Asp Asn Asp Gln
                                265
Met Ala Ser Val Phe Tyr Thr Thr Ile Val Pro Met Leu Asn Pro Val
        275
                            280
                                                285
Val Tyr Ser Leu Arg Asn Lys Glu Val His Asn Ala Phe Lys Lys Val
                        295
Val Glu Lys Met Asn Thr Leu Leu Asn Ser
                    310
```

<210> 2510 <211> 312 <212> PRT

<213> Mus musculus

<400> 2510 Met Thr Leu Val Lys Asn Trp Thr Tyr Val Thr Glu Phe Ile Leu Leu 10 Gly Leu Thr Asp Asp Pro Gly Leu Gln Leu Pro Leu Phe Val Ile Phe 25 Leu Leu Ile Tyr Ile Ile Thr Leu Val Gly Asn Leu Gly Met Ile Leu 40 Leu Ile Phe Leu Asp Ser Gln Leu His Ile Pro Met Tyr Phe Phe Leu 55 Gly Asn Leu Ser Leu Val Asp Val Cys Tyr Ser Ser Ala Val Thr Pro 75 Lys Val Ile Ala Gly Leu Leu Ile Gly Asp Lys Phe Ile Ser Tyr Asn 90 95 Asp Cys Ala Ala Gln Met Phe Phe Phe Ala Ala Phe Ala Thr Val Glu 105 Asn Tyr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Val Cys 120 Lys Pro Leu His Tyr Thr Thr Thr Met Thr Ser Asn Val Cys Ile Cys 135 140 Leu Ile Met Gly Cys Tyr Gly Phe Ser Phe Leu Asn Val Ser Val Tyr 150 155 Leu Gly Asp Thr Phe Ser Leu Ser Phe Cys Asn Ser Asn Val Val His 170 His Phe Phe Cys Asp Met Pro Ala Ile Met Ala Leu Ser Cys Ser Asp 180 185 190 Lys His Val Asn Glu Leu Val Leu Ile Tyr Leu Ala Ser Phe Asn Ile 200 205 Phe Val Ala Phe Ile Met Ile Ile Val Ser Tyr Leu Ile Ile Phe Ile 210 215 220 Thr Ile Leu Asn Met Arg Ser Arg Ala Gly Val Gln Lys Ala Leu Ser 235 230 Thr Cys Val Ser His Leu Thr Ala Val Phe Ile Phe Tyr Gly Thr Ile 250 255 245 Ile Phe Met Tyr Leu Gln Pro Ser Ser Arg His Ala Met Asp Thr Asp 260 265 270 Lys Ile Val Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro

```
280
       275
Leu Val Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Met Lys
                                            300
                       295
Ile Val Leu Lys Glu Lys Ser Leu
                   310
<210> 2511
<211> 314
<212> PRT
<213> Mus musculus
<400> 2511
Met Glu Asn Ile Ser Glu Val Thr Glu Phe Ile Leu Met Gly Ile Thr
                                    10
               5
Asp Ala Pro Glu Leu Gln Ile Pro Leu Phe Ile Ile Phe Thr Leu Ile
                                25
           20
Tyr Leu Ile Ala Leu Phe Gly Asn Leu Gly Met Ile Met Leu Ile Leu
                            40
                                                45
Leu Asp Ser Arg Leu His Ser Pro Met Tyr Phe Phe Leu Cys Asn Leu
                        55
Ser Leu Val Asp Cys Val Tyr Ala Ser Ala Val Thr Pro Lys Val Met
                   70
                                        7.5
Glu Gly Phe Leu Thr Gly Asn Lys Ile Ile Ser Tyr Asn Ala Cys Ala
               85
                                    90
Ala Gln Met Phe Phe Val Ala Phe Gly Ala Ile Glu Ser Leu Ile
           100
                                105
                                                    110
Leu Ala Ser Met Ala Tyr Asp Arg His Ala Ala Val Cys Lys Pro Leu
                           120
                                                125
       115
His Tyr Thr Thr Ile Met Thr Ser Thr Thr Cys Ile Leu Ile Val Thr
                       135
                                            140
Cys Cys Tyr Met Cys Gly Ile Leu Gln Ser Ser Ile His Val Ala Leu
                                       155
                   150
Ala Phe Cys Leu Ser Phe Cys Asn Ser Asn Val Ile Asn His Phe Phe
                                    170
                                                        175
               165
Cys Asp Ile Pro Pro Leu Leu Asp Ile Ser Cys Ser Asp Thr Tyr Thr
       180
                                185
                                                   190
Asn Glu Ile Thr Val Leu Ile Leu Gly Thr Cys Asp Gly Ile Leu Thr
                            200
                                                205
Leu Leu Val Ile Leu Asn Thr Tyr Leu Leu Ile Phe Ile Ala Ile Leu
                       215
                                            220
Arg Met Arg Ser Ala Glu Ala Gln Arg Lys Ala Phe Ser Thr Cys Ala
                                       235
                    230
Ser His Leu Ile Thr Val Phe Ile Phe Phe Gly Ser Thr Leu Phe Met
                                    250
                245
Tyr Leu Gln Pro Ser Ser Asn His Ser Met Asp Thr Asp Lys Ile Ala
                                265
                                                    270
           260
Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Val Val Tyr
                            280
                                                285
Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Lys Lys Val Val Gly
                       295
Lys Leu Met Thr Ser Leu Gln Leu Val Asn
                    310
<210> 2512
<211> 322
```

<212> PRT

<213> Mus musculus

```
<400> 2512
Met Gly Asp Lys Glu Arg Asp Asn His Ser Glu Val Thr Asp Phe Ile
His His Ser Glu Val Thr Asp Phe Ile Leu Val Gly Ile Arg Val Arg
                                25
Pro Glu Leu His Ser Val Leu Phe Leu Phe Leu Ile Ile Tyr Gly
                            40
Met Val Leu Leu Gly Asn Leu Ser Met Ile Gly Ile Ile Val Thr Asp
                        55
Pro Arg Leu Asn Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Val
                                        75
                    70
Ile Asp Leu Ser Tyr Ser Thr Val Ile Val Pro Lys Ala Met Val Asn
                85
                                    90
Ile Leu Ser Gln Lys Lys Thr Ile Ser Phe Val Gly Cys Ala Ala Gln
            100
                                105
Leu Phe Leu Tyr Ala Leu Phe Met Val Thr Glu Ala Phe Ile Leu Ala
                                                125
        115
                            120
Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys Asn Pro Leu Leu Tyr
                        135
                                            140
Ser Val Arg Met Ser Arg Ser Val Cys Val Gln Leu Val Ala Gly Ser
                    150
                                        155
Tyr Leu Cys Gly Trp Val Ser Ser Ile Leu Gln Ile Ser Val Thr Phe
                                    170
                165
                                                        175
Ser Met Ser Phe Cys Ala Ser Arg Val Ile Asp His Phe Tyr Cys Asp
                                                   190
           180
                                185
Ser Asn Pro Ile Glu Lys Ile Ser Cys Ser Asn Thr Phe Ile Asn Lys
                            200
                                                205
       195
Met Val Ser Leu Ser Leu Ala Val Leu Ile Ile Leu Pro Thr Ile Ile
                                            220
                        215
Val Ile Val Val Ser Tyr Met Tyr Ile Val Ser Thr Val Leu Lys Ile
                    230
                                        235
His Ser Ser Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser His
               245
                                    250
Leu Gly Val Val Ser Leu Leu Tyr Gly Thr Val Ser Phe Val Tyr Leu
            260
                                265
Thr Pro Pro Asn Asn Pro Glu Leu Arg Lys Ile Ala Ser Val Cys Tyr
                            280
        275
                                                285
Ile Leu Phe Thr Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn
                       295
                                            300
Lys Asp Val Lys Asp Ala Met Lys Lys Val Leu Cys Lys Gln Lys Val
305
                    310
                                        315
Leu Leu
```

```
<210> 2513
<211> 328
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<212> PRT <213> Mus musculus

<400> 2513

 Met Ile Thr His Phe Ser Val Val Ser Val Phe Leu Thr Ala Phe Gly 1

 Ser Lys Asn Ser Ser Ile His Phe Val Thr Glu Phe Ile Leu Leu Gly 20

 Phe Ser Asn Gln Gly Glu Met Gln Ser Phe Phe Phe Cys Ser Ile Leu 35

 Ile Leu Tyr Leu Leu Thr Leu Leu Gly Asn Gly Thr Ile Val Cys Ala

```
Val Arq Trp Asp Gln Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly
                    70
                                        75
Asn Phe Ala Phe Leu Glu Ile Trp Tyr Val Ser Ser Thr Ile Pro Asn
                                    90
Met Leu Val Asn Ile Leu Ser Glu Asn Lys Thr Ile Ser Phe Ser Ala
                                105
Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser Leu Gly Thr Thr Glu Cys
                            120
Phe Phe Leu Ser Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg
                        135
                                            140
Pro Leu His Tyr Pro Ser Ile Met Thr Arg Lys Phe Cys Val Ile Leu
                    150
                                        155
Ile Cys Ile Cys Trp Val Ser Gly Phe Leu Cys Tyr Pro Val Pro Ile
                165
                                    170
Val Leu Ile Ser Gln Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His
            180
                                185
                                                     190
Phe Val Cys Asp Pro Gly Pro Leu Phe Ala Leu Ser Cys Val Pro Ala
        195
                            200
                                                 205
Pro Ser Thr Glu Leu Cys Tyr Thr Phe Asn Ser Met Ile Ile Phe
                        215
                                            220
Gly Pro Phe Phe Cys Ile Leu Gly Ser Tyr Thr Leu Val Leu Arg Ala
                    230
                                        235
Val Phe Arg Val Pro Ser Gly Ala Gly Arg Thr Lys Ala Phe Ser Thr
                                    250
Cys Gly Ser His Leu Val Val Ser Leu Phe Tyr Gly Thr Leu Met
            260
                                265
                                                     270
Val Met Tyr Val Ser Pro Thr Ser Gly Asn Pro Ala Gly Met Gln Lys
        275
                            280
                                                285
Ile Val Thr Leu Ile Tyr Ser Ala Leu Thr Pro Leu Leu Asn Pro Leu
                        295
                                            300
Ile Tyr Thr Leu Arg Asn Lys Glu Met Lys Asn Ala Leu Lys Lys Leu
                    310
                                        315
Leu Lys Leu Thr Ile Ile Gln Asn
<210> 2514
<211> 314
<212> PRT
<213> Mus musculus
<400> 2514
Met Asn Val Ser Glu Gly Ser Thr Val Thr Tyr Phe Val Leu Leu Gly
                                    10
Phe Pro Gly Pro Trp Lys Ile Gln Ile Thr Leu Phe Ser Leu Ile Leu
                                25
Leu Leu Tyr Met Ile Thr Leu Thr Gly Asn Met Ala Ile Ile Cys Ala
                            40
Val Arg Trp Asn Gln Gln Leu His Thr Pro Met Tyr Met Phe Leu Ala
                        55
Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Thr Cys Thr Val Pro Asn
Met Leu Ile Asn Ser Leu Ser Lys Thr Lys Thr Ile Ser Phe Thr Gly
                                    90
```

Cys Phe Thr Gln Phe Tyr Phe Phe Phe Ser Leu Gly Thr Thr Glu Cys
100 105 110

Phe Phe Leu Cys Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Tyr
115 120 125

```
Pro Leu His Tyr Pro Ser Ile Met Thr Arg Gln Phe Cys Ser Ile Leu
                        135
Met Ser Leu Cys Trp Ile Ile Gly Phe Ser Ala His Leu Ile Pro Ile
                    150
Phe Leu Ile Ser Gln Leu Ser Phe Cys Gly Pro Asn Ile Ile Asp His
                                    170
Phe Leu Cys Asp Val Asp Pro Leu Ile Ala Leu Ser Cys Thr Pro Thr
                                185
His Ile Ile Ser His Val Phe Tyr Ser Ile Ser Thr Leu Ile Ile Ile
                            200
Leu Thr Gly Leu Tyr Ile Leu Gly Ser Tyr Ala Leu Val Leu Arg Ala
                        215
Val Leu Gln Val Pro Ser Ser Asp Gly Arg Gln Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Thr Ile Met
                                    250
Val Met Tyr Val Ser Pro Thr Ser Gly Asn Ser Val Asp Met Asn Lys
                                265
Ile Ile Thr Leu Ile Tyr Ser Val Val Thr Pro Ala Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Tyr Ala Leu His His Val
   290
                        295
                                            300
Phe Phe Gly Asn Ser Ile Met Gln Asn Leu
```

<210> 2515 <211> 314 <212> PRT

<213> Mus musculus

<400> 2515

Lys Asn Lys Asn Ser Ser Asp Val Ser Arg Phe Val Leu Leu Gly Leu Ser Ser Ser Trp Glu Leu Gln Leu Phe Leu Phe Phe Thr Phe Leu Leu 25 Ile Tyr Leu Val Ile Val Leu Gly Asn Leu Leu Ile Val Met Val Val 40 Gln Ala Asp Ala His Leu Phe Gln Ser Pro Met Tyr Tyr Phe Leu Ser 55 His Leu Ser Phe Ile Asp Leu Cys Leu Ser Cys Val Ala Val Pro Lys 70 75 Met Leu Gly Asp Phe Leu Gln Lys Glu Lys Thr Ile Ser Phe Ser Gly 90 Cys Leu Ala Gln Val Phe Phe Leu His Phe Leu Gly Ala Ser Glu Met 100 105 Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu His Tyr Leu Thr Val Met Asn Asn His Leu Arg Leu Arg Leu 140 Val Phe Gly Cys Trp Cys Gly Gly Phe Ile His Ser Ile Thr Gln Val 150 155 Met Ile Val Ile Gln Leu Pro Phe Cys Gly Pro Asn Glu Leu Asp Asn 170 Phe Tyr Cys Asp Val Pro Gln Val Val Lys Leu Ala Cys Met Asp Thr 185 190 Tyr Leu Val Glu Val Leu Met Val Ser Asn Ser Gly Ile Leu Ser Leu 200 Val Cys Phe Leu Val Leu Leu Phe Ser Tyr Ala Leu Ile Leu Ile Thr

```
215
                                            220
Leu Arg Thr His Leu His Arg Gly Gln Ser Lys Ala Leu Ser Thr Cys
                    230
                                        235
Ala Ser His Leu Thr Val Val Ser Leu Ile Phe Val Pro Cys Val Phe
                                    250
Ile Tyr Leu Arg Pro Phe Cys Thr Phe Ser Val Asp Lys Val Val Ser
                                265
Val Phe Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr
        275
                            280
Leu Arg Asn Ala Asp Met Lys Gln Ala Ile Glu Lys Leu Arg Lys Lys
                        295
                                            300
Gln Val Ala Ser His Cys Phe Ala Lys Gly
                    310
<210> 2516
<211> 326
<212> PRT
<213> Mus musculus
<400> 2516
Met Gln Ser Lys Tyr Val Asn Leu Gln Arg Ala Asn Lys Phe Lys Ile
Thr Asp Thr Asn Leu Ser Val Pro Ile Glu Phe Val Leu Leu Gly Phe
            20
                                25
Ser Asp Ile Pro Gln Leu His Trp Phe Leu Phe Gly Ile Phe Phe Phe
                            40
Ile Tyr Met Ile Ile Leu Leu Gly Asn Gly Leu Ile Ile Leu Ile Thr
                        55
Arg Val Glu Pro Thr Leu Gln Thr Pro Met Tyr Phe Phe Ile Ser Asn
                                        75
Leu Ser Phe Leu Glu Ile Cys Tyr Val Ser Val Thr Leu Pro Arg Met
                                    90
                85
Leu Met Asp Leu Phe Thr Leu Lys Gly Asn Ile Ser Phe Leu Ala Cys
            100
                                105
Ala Thr Gln Met Cys Leu Phe Leu Ile Leu Gly Gly Thr Glu Cys Phe
        115
                            120
                                                 125
Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                        135
                                            140
Leu His Tyr Pro Ile Val Met Ser Ser Lys Val Cys Thr Gln Leu Val
                    150
                                        155
Val Gly Ser Trp Val Ile Gly Val Pro Ile Gln Val Gly Gln Thr Tyr
                165
                                    170
Gln Ile Leu Ser Leu Pro Phe Cys Glu Ser Asn Gln Ile Asn His Phe
            180
                                185
                                                     190
Phe Cys Asp Met Pro Pro Leu Leu Arg Leu Ala Cys Gly Asn Ile Phe
        195
                            200
Val Asn Glu Leu Val Val Phe Ile Phe Val Val Leu Ile Val Thr Ile
                        215
                                            220
Pro Phe Met Leu Ile Leu Ala Ser Tyr Ser Arg Ile Ile Ser Thr Ile
                    230
                                        235
Leu Lys Leu Pro Ser Lys Thr Gly Arg Thr Lys Ala Phe Ser Thr Cys
                                    250
Ser Ser His Leu Ile Val Val Phe Leu Phe Tyr Gly Ser Ala Ser Ile
Thr Tyr Leu Lys Pro Lys Ser Asn Lys Phe Glu Gly Thr Asp Lys Leu
                            280
Leu Ser Leu Phe Tyr Thr Ile Leu Thr Pro Met Phe Asn Pro Leu Ile
                                            300
```

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Thr Arg Leu Leu Ala Leu
<210> 2517
<211> 310
<212> PRT
<213> Mus musculus
<400> 2517
Met Gly Ala Asn Gln Thr Trp Val Thr Asp Phe Ile Leu Val Gly Leu
                                    10
Gln Leu Ser Ala Gly Ile Glu Met Phe Leu Phe Trp Ile Phe Ser Leu
                                25
Leu Tyr Ile Phe Ser Leu Leu Ala Asn Gly Ile Ile Leu Val Val Ile
                            40
Cys Leu Asp Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ser His
                        55
Leu Ala Ile Leu Asp Ile Ser Tyr Ala Ser Asn Asn Val Pro Lys Met
                    70
                                        75
Leu Ser Asn Leu Ile Asn Gln Lys Arg Thr Ile Ser Phe Ala Pro Cys
                                    90
                8.5
Ile Thr Gln Thr Phe Leu Tyr Leu Ala Phe Ala Ala Ser Glu Cys Leu
           100
                                105
Ile Leu Ala Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His Pro
                            120
Leu His Tyr Thr Val Ile Met Ser Trp Lys Val Cys Val Ala Leu Ala
    130
                        135
                                            140
Val Thr Ser Trp Ser Cys Gly Phe Ser Leu Ser Val Ala His Thr Ile
                    150
                                        155
Leu Leu Leu Arg Leu Pro Phe Cys Gly Pro Gln Glu Ile Asn His Leu
                                    170
               165
                                                        175
Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr Leu
           180
                                185
                                                   190
Ile Asn Gln Ile Val Ile Leu Ala Ala Cys Val Phe Val Leu Val Gly
       195
                            200
Pro Leu Cys Ser Met Leu Val Ser Tyr Thr His Ile Leu Trp Thr Ile
                        215
                                            220
Leu Lys Met Gln Ser Lys Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ile Ala Met Leu
                245
                                    250
Val Tyr Met Val Pro Asp Ser Asp Gln Arg Glu Glu Gln Glu Lys Ile
                                265
Leu Ser Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
                            280
                                               285
Tyr Ser Leu Arg Asn Thr Gln Val Lys Glu Ala Phe His Arg Ala Leu
                        295
Gln Lys Lys Arg Ser Val
305
<210> 2518
<211> 308
<212> PRT
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<213> Mus musculus

Tyr Ser Leu Arg Asn Lys Asp Val Thr Gly Ala Leu Lys Lys Leu Phe

```
<400> 2518
Met Asn Gln Thr Trp Ile Thr Glu Val Ile Leu Leu Gly Phe Gln Val
Asp Pro Ser Leu Glu Met Leu Leu Phe Gly Leu Phe Leu Leu Phe Tyr
Cys Leu Thr Leu Met Gly Asn Gly Ile Ile Leu Gly Leu Ile Cys Leu
                            40
Asp Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu Ala
                        55
Ile Val Asp Met Ser Tyr Ala Ser Ser Thr Ala Pro Lys Met Leu Thr
                    70
                                        75
Asn Met Val Met His Gln Lys Ser Ile Ser Phe Ala Ser Cys Ile Leu
                                    90
Gln Thr Phe Leu Tyr Leu Ala Phe Ala Val Thr Glu Cys Leu Ile Leu
                                105
            100
Val Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His Pro Leu Lys
                            120
        115
Tyr Thr Leu Ile Met Ser Trp Arg Val Cys Ser Ile Leu Ala Ala Thr
                        135
                                            140
Cys Trp Val Phe Ser Phe Leu Leu Ala Ser Leu His Ile Thr Leu Ile
                    150
                                        155
Leu Arg Leu Pro Phe Cys Gly Pro Gln Lys Val Asn His Phe Phe Cys
                                    170
                165
Gln Ile Met Ser Val Phe Arg Leu Ala Cys Ala Asp Thr Arg Leu Asn
            180
                                185
                                                    190
Gln Val Val Leu Phe Ala Gly Ser Val Met Val Leu Leu Gly Pro Leu
        195
                            200
                                                205
Cys Leu Val Leu Val Ser Tyr Thr Arg Ile Leu Val Ala Ile Leu Gly
                        215
                                            220
Ile His Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ser Ser
                    230
                                        235
His Leu Cys Val Val Gly Leu Phe Phe Gly Cys Ala Ile Ala Met Tyr
                245
                                    250
Met Ala Pro Lys Ser Lys His Ser Gln Glu Gln Arg Lys Ile Leu Ser
                                265
            260
Leu Phe Tyr Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile Tyr Ser
        275
                            280
                                                285
Leu Arg Asn Thr Glu Val Lys Gly Ala Leu Arg Arg Val Leu Trp Lys
Gln Arg Ser Leu
305
<210> 2519
<211> 316
<212> PRT
<213> Mus musculus
<400> 2519
Met Ala Tyr Glu Val Val Asn Gln Ser Ser Ala Thr Thr Phe Ile Leu
                                    10
Val Gly Phe Ser Glu Tyr Pro Gln Leu Gln Ile Pro Leu Phe Leu Leu
            20
                                25
Phe Leu Thr Ile Tyr Ser Val Thr Leu Met Gly Asn Leu Gly Ile Leu
                            40
Val Val Ile Lys Val Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe
                        5.5
                                            60
```

Leu Ser His Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Phe Thr

```
Pro Lys Leu Gln Ile Leu Ile Met Glu Asp Arg Thr Ile Ser Phe
Ile Gly Cys Met Ile Gln Phe Phe Phe Ile Cys Thr Phe Val Ile Thr
                               105
Glu Met Phe Met Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val
       115
                           120
                                               125
Cys Asn Pro Leu Leu Tyr Thr Val Val Met Pro Ile Gln Phe Cys Ala
                       135
Leu Leu Val Ala Gly Thr Tyr Met Ile Gly Gly Leu Cys Thr Leu Ile
                   150
                                       155
Ile Leu Tyr Thr Leu Leu Gln Leu Cys Tyr Phe Glu Tyr Gly Ile Ile
                                   170
               165
Asn His Phe Gly Cys Glu Tyr Ser Ala Val Ile Ser Val Ser Cys Ser
           180
                               185
                                                   190
Asp Ser Ser Phe Ser Gln Leu Ile Cys Leu Val Ile Ser Ile Ala Ser
                           200
       195
Glu Phe Ser Ser Val Leu Ile Thr Leu Ala Ser Tyr Val Phe Ile Val
                       215
                                           220
Val Thr Ile Ile Lys Met Pro Ser Lys Gly Gly Leu Gln Lys Ala Phe
                   230
                                       235
Ser Thr Cys Thr Ser His Leu Thr Ala Ile Thr Ile Phe His Gly Ile
                                   250
               245
Leu Leu Leu Tyr Cys Ile Pro Asn Ser Asn Ser Ser Arg Leu Phe
           260
                               265
Val Lys Val Ala Thr Ala Leu Tyr Thr Ile Met Ile Pro Met Leu Asn
                           280
                                              285
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Thr Val Arg
                      295
Arg Leu Ile Ser Ser Lys Leu His Ser His Leu Thr
                   310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 2520

Met Gln Arg Arg Met Glu Gly Glu Asn Cys Ser Ser Phe Thr Glu Phe - 5 Ile Leu Met Gly Ile Thr Asn Asn Ser Glu Val Lys Val Val Leu Phe 20 25 Thr Ile Phe Leu Leu Val Tyr Leu Ile Asn Leu Ile Gly Asn Leu Gly 40 Met Ile Leu Leu Ile Lys Val Asp Pro Gln Leu Gln Thr Pro Met Tyr 55 Phe Phe Leu Ser Asn Leu Ser Phe Cys Asp Leu Cys Tyr Ser Thr Ala 70 75 Val Gly Pro Lys Met Leu Met Asp Ile Phe Gly Asn Asp Lys Ser Ile 8.5 90 Gln Phe Phe Gly Cys Ala Leu Gln Phe Phe Ile Ser Cys Thr Phe Val 100 105 110 Asp Ser Glu Cys Ile Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Gln 115 120 125 Ala Ile Ser Asn Pro Leu Leu Tyr Thr Thr Asn Met Ser Asn Arg Leu 135 140 Cys Ser Leu Leu Val Ala Gly Val Tyr Phe Val Gly Val Ala Asp Ser 155 150 Leu Ile His Thr Thr Leu Thr Phe His Leu Cys Phe Cys Gly Ser Asn

```
165
                                    170
Glu Ile Asp His Phe Phe Cys Asp Ile Pro Pro Ile Leu Leu Ser
                                185
                                                    190
Cys Ser Asp Thr Gln Val Asn Glu Leu Ala Ile Phe Thr Ile Phe Gly
                            200
                                                205
        195
Phe Ile Glu Leu Ser Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr
                        215
Ile Ile Ser Ser Val Leu Lys Ile Ser Ser Ala Gly Gly Arg Phe Lys
                    230
                                        235
                                                             240
Ala Phe Ser Thr Cys Ala Ser His Leu Thr Ala Val Ala Ile Phe Gln
                                    250
                245
Gly Thr Val Leu Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu
                                265
                                                    270
Asp Gln Asp Lys Met Ser Ser Leu Phe Tyr Ile Leu Val Ile Pro Met
        275
                            280
Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala
                        295
                                            300
Leu Lys Asn Leu Lys Asn Lys Arg Cys Cys
                    310
<210> 2521
<211> 332
<212> PRT
<213> Mus musculus
<400> 2521
Met Leu Pro Phe Asn Asp Glu Asp Glu Phe Ser Leu Phe Arg Tyr Ser
                                                        15
Arg Thr Met His Gln Gly Asn Gln Thr Ala Ile Ser Gly Phe Ile Leu
Leu Gly Leu Thr Val Gly Ser Glu Gln Gln Leu Leu Phe Thr Leu
Phe Leu Cys Met Tyr Leu Val Thr Met Val Gly Asn Ser Leu Ile Ile
Leu Ala Ile Ile Ser Asp Thr His Leu Tyr Ser Pro Met Tyr Phe Phe
                    70
                                        75
Leu Ala Asn Leu Ser Phe Thr Asp Ile Cys Phe Thr Thr Thr Val
                85
                                    90
Pro Lys Ile Leu Ala Asp Ile Gln Ser Gln Asn Pro Thr Ile Ser Phe
            100
                                105
                                                    110
Val Gly Cys Phe Thr Gln Met Tyr Phe Phe Met Phe Leu Val Asp Leu
                            120
        115
Asp Asn Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ile Ala Ile
                        135
                                            140
Cys His Pro Leu His Tyr Ala Ala Leu Leu Asn Pro Lys Arg Cys Ala
                    150
                                        155
Leu Leu Val Val Pro Trp Val Ile Ser Asn Leu Val Ser Val Leu
                                    170
His Leu Ser Leu Leu Ser Arg Leu Pro Phe Cys Asp Gln Arg Val Ile
```

Pro His Phe Phe Cys Asp Leu Glu Pro Val Leu Arg Leu Ala Cys Ser

Asp Thr Gln Ile Asn Asn Leu Leu Ile Leu Ile Val Gly Gly Thr Val

Ile Phe Val Pro Phe Val Phe Ile Leu Val Ser Tyr Ala Leu Ile Gly

Thr Ala Val Leu Asn Val Pro Ser Val Lys Gly Lys Trp Lys Thr Phe

```
Ser Thr Cys Gly Ser His Leu Ser Ala Val Ser Leu Phe Tyr Gly Ser
                                265
Ile Val Gly Val Tyr Phe Leu Pro Ala Ser Ser Tyr Ser Ala Glu Arg
        275
                            280
                                                285
Asp Lys Val Ala Ala Ile Met Tyr Thr Val Val Thr Pro Met Met Asn
   290
                        295
                                            300
Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Arg Ala Leu Arg
                                        315
                    310
Arg Leu Leu Ser Gln Lys Ser Leu Ile Cys Ser Trp
                325
                                    330
<210> 2522
<211> 315
<212> PRT
<213> Mus musculus
<400> 2522
Met Met Gln Asn Ile Ser Glu Leu Ser Glu Phe Ile Leu Leu Gly Leu
                                    1.0
Thr Asp Ala Pro Phe Leu Gln Thr Pro Leu Phe Ile Ile Phe Thr Leu
            20
                                25
Ile Tyr Leu Thr Thr Leu Phe Gly Asn Leu Gly Met Ile Leu Leu Ile
        35
                            40
Leu Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn
                        55
Leu Ser Leu Val Asp Cys Val Tyr Ala Ser Ala Val Thr Pro Lys Val
                    70
                                        75
Ile Glu Gly Phe Leu Thr Glu Asn Lys Ile Ile Ser Tyr Asn Ala Cys
                85
                                    90
Ala Ala Gln Met Phe Phe Val Ala Phe Ala Ile Thr Glu Cys Phe
                                105
                                                    110
Ile Leu Ala Ser Met Ala Tyr Asp Arg His Ala Ala Val Cys Lys Pro
                            120
                                                125
Leu His Tyr Ser Thr Thr Met Thr Thr Thr Ile Cys Val Leu Leu
                        135
                                            140
Ala Gly Ser Tyr Leu Ser Gly Leu Leu Gln Ser Ser Ile His Val Ser
                    150
                                        155
Phe Thr Phe His Leu Ser Phe Cys Arg Ser Asn Val Val Asn His Phe
                165
                                    170
```

Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Ser Ile His

Ile Asn Glu Ile Ile Leu Phe Met Leu Ala Gly Phe Asn Val Val Phe

Ser Leu Leu Val Ile Leu Thr Ser Tyr Leu Leu Ile Ser Val Ala Ile

Val Arg Met Arg Ser Ala Glu Ser Arg Lys Lys Ala Ile Ser Thr Cys

Ala Ser His Leu Thr Thr Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe

Met Tyr Leu Gln Pro Ser Ser Asn His Ser Met Asp Thr Asp Lys Met

Ala Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val

Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Val Arg Lys Val Ala

Gly Lys Ala Leu Phe Ser Leu Gly Leu Val Asn

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<211> 320
<212> PRT
<213> Mus musculus
<400> 2523
Met Asn Val Ser Phe Lys Thr Gly Phe Leu Leu Met Gly Phe Ser Asp
1
Glu Arg Asn Leu Gln Ile Leu His Ala Val Leu Phe Leu Ile Thr Tyr
            20
                                25
Leu Leu Ala Ile Met Gly Asn Leu Leu Ile Ile Thr Ile Ile Thr Leu
        35
                            40
Asp Gln Arg Leu His Ser Pro Met Tyr Tyr Phe Leu Lys His Leu Ser
                        55
Phe Leu Asp Leu Cys Phe Ile Ser Val Thr Val Pro Gln Ser Ile Ala
                    70
                                         75
Asn Ser Leu Met Asn Asn Gly Phe Ile Ser Leu Gly Gln Cys Met Leu
                85
Gln Val Phe Phe Ile Ala Leu Ala Ser Ser Glu Val Ala Ile Leu
            100
                                105
Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu Gln
        115
                            120
                                                 125
Tyr Glu Thr Ile Met Asp Pro His Ala Cys Lys Cys Ala Val Ile Ala
                        135
                                            140
Val Trp Met Ala Gly Gly Leu Ser Gly Leu Leu His Thr Gly Val Asn
                    150
                                        155
Phe Ser Ile Pro Leu Cys Gly Lys Arg Ile Ile His Gln Phe Phe Cys
                                    170
                165
Asp Ile Pro Gln Met Leu Lys Leu Ala Cys Ser Tyr Glu Phe Ile Asn
            180
                                185
                                                     190
Glu Ile Ala Val Ala Ala Phe Thr Thr Ser Thr Ala Phe Val Cys Leu
        195
                            200
Ile Ala Ile Val Phe Ser Tyr Thr Gln Ile Phe Ser Thr Val Met Arg
                        215
                                             220
Ile Pro Ser Ala Asp Ser Arg Thr Lys Val Phe Ser Thr Cys Leu Pro
                    230
                                         235
His Leu Phe Val Val Met Phe Phe Leu Ser Ala Ala Gly Phe Glu Phe
                                    250
Leu Arg Pro Pro Ser Asp Ser Leu Ser Ala Met Asp Leu Ile Phe Ser
                                265
Ile Phe Tyr Thr Val Ile Pro Pro Thr Leu Asn Pro Leu Ile Tyr Ser
                            280
Leu Arg Asn Glu Ala Met Lys Ala Ala Leu Arg Lys Val Leu Ser Lys
                        295
                                             300
Glu Glu Phe Ser Arg Arg Met Val Tyr Val Lys Ala Ile Phe Asn Leu
                    310
<210> 2524
<211> 312
<212> PRT
<213> Mus musculus
<400> 2524
Met Ile Val Glu Asn Ile Thr Thr Met Arg Gly Phe Leu Leu Met Gly
1
                                    10
Phe Ser Asp Asn His Glu Leu Gln Ile Leu Gln Ala Leu Leu Phe Leu
            20
                                25
                                                     30
```

```
Val Thr Tyr Leu Leu Gly Ser Ala Gly Asn Val Ile Ile Ile Thr Ile
Thr Thr Leu Asp Pro Gln Leu Gln Ser Pro Met Tyr Tyr Phe Leu Lys
His Leu Ser Ile Leu Asp Leu Ser Ser Leu Ser Val Thr Val Pro Gln
                    70
Tyr Val Asp Ile Cys Leu Thr Gln Ser Gly Tyr Ile Ser Tyr Ala Gln
                85
                                    90
Cys Met Leu Gln Ile Phe Phe Phe Thr Gly Phe Ala Trp Gly Glu Val
            100
                                105
Ala Ile Leu Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Leu
                            120
Pro Leu His Tyr Glu Val Ile Met Gly Pro Ser Lys Cys Arg Trp Ala
                        135
Val Thr Ala Val Trp Leu Ser Ser Val Ile Pro Gly Thr Leu Tyr Ile
                    150
                                        155
Ala Ser Ile Phe Ser Ile Arg Phe Cys Gly Asp Arg Ile Ile His Gln
                165
                                    170
Phe Phe Cys Asp Val Pro Gln Val Leu Lys Phe Ser Cys Ser Asp Asp
            180
                                185
                                                    190
Tyr Leu Val Thr Val Gly Val Ala Asp Phe Leu Ser Ala Val Ala Phe
        195
                            200
Ala Cys Phe Ile Gly Ile Val Asn Ser Tyr Val His Ile Phe Ser Thr
                        215
Val Leu Arg Met Pro Ser Ala Glu Ser Arg Ser Lys Val Phe Ser Thr
                    230
                                        235
Cys Leu Pro His Leu Phe Val Val Leu Leu Phe Leu Ser Thr Gly Ile
                245
                                    250
Phe Ala Tyr Leu Asn Pro Thr Ser Asp Ser Pro Thr Ala Leu Gln Phe
                                265
Leu Val Ser Ile Phe Tyr Thr Val Leu Pro Pro Thr Leu Asn Pro Val
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Glu Thr Ile Lys Ser Val Ile Arg Lys Leu
                        295
Leu Leu Ser Ser Lys Phe Thr Gly
```

```
<210> 2525
```

<400> 2525

 Met
 Ile
 Cys
 Cys
 Pro
 Phe
 Phe
 Glu
 Met
 Ser
 Ile
 Asn
 Cys
 Ser
 Leu

 Trp
 Glu
 Asn
 Ser
 Leu
 Ser
 Val
 Lys
 Arg
 Phe
 Ala
 Phe
 Ala
 Lys
 Phe

 Ser
 Glu
 Val
 Pro
 Gly
 Glu
 Cys
 Phe
 Leu
 Leu
 Phe
 Thr
 Leu
 Ile
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Ile
 Leu
 Ile
 Ala
 Ile
 Leu
 Ile
 Ala
 Ile
 Ile

<211> 330

<212> PRT

<213> Mus musculus

```
115
                            120
Leu Leu Ala Ala Met Ala Phe Asp Arg Tyr Met Ala Ile Cys Ser Pro
                        135
                                            140
Leu His Tyr Ala Thr Arg Met Ser Arg Gly Val Cys Ala His Leu Ala
                                        155
                    150
Ile Val Ser Trp Gly Met Gly Cys Ile Val Gly Leu Gly Gln Thr Asn
                165
                                    170
Phe Ile Phe Ser Leu Asn Phe Cys Gly Pro Cys Glu Ile Asp His Phe
           180
                                185
                                                    190
Phe Cys Asp Leu Pro Pro Val Leu Ala Leu Ala Cys Gly Asp Thr Ser
       195
                            200
                                                205
Gln Asn Glu Ala Ala Ile Phe Val Ala Ala Val Leu Cys Ile Phe Ser
                        215
Pro Phe Leu Ile Ile Ser Ser Tyr Val Arg Ile Leu Ile Ala Val
                    230
                                        235
Leu Val Met Pro Ser Arg Glu Gly Arg His Lys Ala Leu Ser Thr Cys
                                    250
Ser Ser His Leu Leu Val Val Thr Leu Phe Tyr Gly Ser Thr Ser Ala
            260
                                265
Thr Tyr Leu Arg Pro Lys Ser Asp His Ser Pro Glu Val Asp Lys Leu
                            280
Leu Ala Leu Phe Tyr Thr Ala Val Thr Ser Met Leu Asn Pro Ile Ile
                        295
Tyr Ser Leu Arg Asn Lys Glu Val Lys Ala Ala Leu Arg Lys Thr Leu
                    310
                                        315
Ser Leu Lys Lys Val Leu Ile Met Asn Arg
<210> 2526
<211> 312
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<212> PRT

<213> Mus musculus

<400> 2526

Met Ile Met Glu Asn Ile Thr Thr Met Ser Gly Phe Leu Leu Met Gly 10 Phe Ser Asp Asn His Glu Leu Gln Ile Leu Gln Ala Val Leu Phe Leu Val Thr Tyr Leu Val Gly Ser Ala Gly Asn Val Ile Ile Ile Thr Ile 40 Thr Thr Leu Asp Pro Gln Leu Gln Ser Pro Met Tyr Tyr Phe Leu Lys 55 Gln Leu Ser Ile Leu Asp Leu Ser Ser Leu Ser Val Thr Val Pro Gln 70 75 Tyr Val Asp Ser Ser Leu Ala Arg Ser Gly Tyr Ile Ser Tyr Gly Gln 90 Cys Met Leu Gln Ile Phe Phe Phe Thr Trp Phe Ala Trp Gly Glu Met 100 105 110 Ala Ile Leu Thr Val Met Ser Tyr Asp Arg Tyr Ile Ala Val Cys Leu 120 125 Pro Leu His Tyr Glu Ile Ile Met Cys Pro Arg Lys Cys Arg Trp Ala 135 140 Val Thr Ala Val Trp Leu Ser Ser Ser Ile Pro Gly Thr Leu Tyr Leu 155 Ala Thr Ile Phe Ser Ile Arg Ile Cys Arg Ala Lys Ile Ile His Gln 170 Phe Phe Cys Asp Val Pro Gln Leu Leu Lys Leu Ser Cys Ser Asn Asp 180 185

```
Tyr Leu Val Ile Met Gly Val Ala Asp Phe Leu Ser Val Ile Gly Phe
                            200
Ala Cys Phe Val Gly Ile Val Ile Ser Tyr Val His Ile Phe Ser Thr
                        215
Val Leu Arg Met Pro Ser Ala Glu Ser Arg Ser Lys Val Phe Ser Thr
                    230
                                        235
Cys Leu Pro His Leu Phe Val Val Ser Leu Phe Leu Ser Thr Gly Ile
                                    250
Phe Ala Tyr Leu Asn Pro Thr Ser Asp Phe Pro Thr Ala Leu Glu Phe
                                265
Leu Phe Ser Val Phe Tyr Thr Val Leu Pro Pro Thr Leu Asn Pro Val
        275
                            280
Ile Tyr Ser Leu Arg Asn Asp Ala Ile Lys Ser Val Val Arg Lys Leu
   290
                        295
Leu Leu Ser Arg Lys Phe Thr Ser
                    310
```

<210> 2527 <211> 315 <212> PRT

<213> Mus musculus

<400> 2527 Met Ile Met Glu Asn Ile Thr Thr Met Ser Gly Phe Leu Leu Met Gly Phe Ser Asp Asn Arg Glu Leu Gln Ile Leu Gln Ala Leu Leu Phe Leu 25 Val Thr Tyr Leu Val Gly Ser Ala Gly Asn Cys Ile Ile Ile Thr Ile Thr Thr Leu Asp Pro Gln Leu Lys Ser Pro Met Tyr Tyr Phe Leu Lys His Leu Ser Ile Leu Asp Leu Ser Ser Leu Ser Val Thr Val Pro Gln 70 75 Tyr Val Asp Ser Ser Leu Ala Arg Ser Gly Tyr Ile Ser Tyr Glu Gln 90 Cys Met Leu Gln Ile Leu Phe Phe Thr Cys Phe Ala Trp Asp Glu Met 100 105 110 Ala Ile Leu Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Leu 120 Pro Leu His Tyr Glu Val Ile Met Ser Pro Arg Lys Cys Thr Trp Ala 135 Leu Ala Ala Val Trp Leu Ser Gly Gly Val Ser Gly Thr Leu Tyr Thr 150 155 Ala Ser Thr Leu Ser Ile Arg Phe Cys Gly Asp Arg Ile Ile His Gln 170 Phe Phe Cys Asp Val Pro Gln Val Leu Lys Leu Ser Cys Ser Asn Asp 185 Tyr Leu Val Thr Ile Gly Val Ala Asn Ile Leu Ser Ala Val Ala Phe 200 Ala Cys Phe Ile Gly Ile Val Ile Ser Tyr Val His Ile Phe Ser Thr 210 215 220 Val Leu Arg Met Pro Ser Ala Glu Ser Arg Tyr Lys Val Phe Ser Thr 230 235

Cys Leu Pro His Leu Phe Val Val Ser Leu Phe Leu Ser Thr Ser Thr

Phe Ala Tyr Leu Asn Pro Thr Ala Asp Ser Pro Thr Ala Leu Glu Phe

265 Leu Phe Ser Ile Leu Tyr Thr Val Leu Pro Pro Thr Ile Asn Pro Val

250

270

275 280 Ile Tyr Ser Leu Arg Asn Glu Thr Ile Lys Arg Val Val Arg Lys Leu 295 300 Leu Ser Ser Thr Lys Phe Thr Val Arg Ile Ile 310 <210> 2528 <211> 330 <212> PRT <213> Mus musculus <400> 2528 Met Ile Cys Cys Pro Phe Phe Gln Glu Met Ser Val Asn Cys Ser Leu Trp Gln Glu Asn Lys Leu Ser Val Lys His Phe Ala Phe Ala Lys Phe 25 Ser Glu Val Pro Glu Glu Cys Phe Leu Leu Phe Thr Leu Ile Leu Leu Met Phe Leu Val Ser Leu Thr Gly Asn Ala Leu Ile Thr Leu Ala Ile Cys Thr Ser Pro Ala Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn 75 65 70 Leu Ser Leu Leu Glu Ile Gly Tyr Thr Cys Ser Val Ile Pro Lys Met 90 95 85 Leu Gln Asn Leu Val Ser Glu Ile Arg Gly Ile Ser Arg Glu Gly Cys 100 105 Ala Thr Gln Met Phe Phe Phe Ile Phe Phe Gly Ile Thr Glu Cys Cys 120 115 Leu Leu Ala Ala Met Ala Phe Asp Arg Tyr Met Ala Ile Cys Ser Pro 135 140 Leu His Tyr Ala Thr Arg Met Ser Arg Glu Val Cys Ala His Leu Ala 150 155 Leu Val Ser Trp Gly Met Gly Cys Ile Val Gly Leu Gly Gln Thr Asn 165 170 Phe Ile Phe Ser Leu Asn Phe Cys Gly Pro Cys Glu Ile Asp His Phe 180 185 190 Phe Cys Asp Leu Pro Pro Val Leu Ala Leu Ala Cys Gly Asp Thr Ser 195 200 Gln Asn Glu Ala Ala Ile Phe Val Thr Val Val Leu Cys Ile Ser Ser 215 Pro Phe Leu Leu Ile Ile Tyr Ser Tyr Val Arg Ile Leu Phe Ala Val 230 235 Leu Val Met Pro Ser Pro Glu Gly Arg His Lys Ala Leu Ser Thr Cys 245 250 Ser Ser His Leu Leu Val Val Thr Leu Phe Tyr Gly Ser Ala Ser Ile 265 Thr Tyr Leu Arg Pro Lys Ser Ser His Ser Pro Gly Ile Asp Lys Leu 280 Leu Ala Leu Phe Tyr Thr Ala Val Thr Ser Met Leu Asn Pro Ile Ile 295 300 Tyr Ser Leu Arg Asn Lys Glu Val Lys Ala Ala Leu Arg Arg Thr Leu 310 315 Ser Leu Lys Lys Pro Leu Ala Ile Asn Arg

```
55
Phe Leu Lys Asn Leu Ser Leu Leu Asp Ile Phe Phe Ile Ser Val Pro
                    70
                                        75
Ile Pro Asn Phe Phe Ile Asn Ser Ile Thr His Asn Asn Ser Ile Ser
                                    90
Ile Leu Gly Cys Ala Leu Gln Val Phe Leu Met Thr Ser Phe Ala Ser
            100
                                105
                                                    110
Gly Asp Val Phe Val Leu Thr Ala Met Ser Tyr Asp His Tyr Val Ala
                            120
Ile Cys Cys Pro Leu His Tyr Glu Thr Ile Met Ser Ser Gly Asn Cys
                        135
Val Leu Met Val Gly Val Ser Trp Ala Ile Gly Val Leu Phe Gly Ala
                    150
                                        155
Leu Tyr Thr Ala Gly Thr Phe Ser Met Pro Phe Cys Gly Ser Ile Val
                                    170
                165
Ile Pro Gln Phe Phe Cys Asp Val Pro Ser Leu Leu Arg Ile Ser Cys
            180
                                185
Ser Asp Ile Leu Val Val Ile Tyr Thr Ser Leu Gly Met Gly Val Cys
                            200
        195
Leu Gly Met Ser Cys Phe Ile Cys Val Val Ile Ser Tyr Phe Tyr Ile
                        215
Phe Ser Thr Val Leu Lys Ile Pro Thr Thr Lys Gly Gln Ser Lys Ala
                                        235
                    230
Phe Ala Thr Cys Leu Pro His Leu Thr Val Phe Ser Val Phe Ile Val
                                    250
Thr Ala Cys Phe Val Tyr Leu Lys Pro Pro Ser Val Val Pro Ser Ile
                                265
Ser Asp Arg Leu Phe Ser Val Leu His Thr Val Leu Pro Pro Ala Leu
                            280
Asn Pro Val Ile Tyr Ser Leu Arg Asn Ser Asp Val Lys Arg Ala Leu
                        295
Lys Arg Leu Gln Gln Asn Leu Cys Pro Ser Gly Ser Leu His Val Thr
Ile Gln Ser
```

<210> 2531 <211> 319

<212> PRT

<213> Mus musculus

<400> 2531

Met Leu Asn Ala Thr Arg Ile Thr Gly Phe Ile Leu Met Gly Phe Ser 10 Val Ala Pro Glu Leu Gln Thr Val Cys Gly Leu Phe Leu Leu Val Met 25 Tyr Leu Ala Val Ile Met Ser Asn Leu Leu Ile Thr Leu Ile Thr Leu Asp Leu Lys Leu Gln Thr Pro Met Tyr Phe Phe Leu Lys Asn Leu 55 Ser Leu Leu Asp Val Phe Phe Ile Ser Val Pro Ile Pro Asn Phe Phe 70 Ile Asn Ser Ile Thr His Asn Asn Ser Ile Ser Ile Leu Gly Cys Ala 85 90 95 Leu Gln Leu Phe Leu Met Thr Ser Phe Gly Ala Gly Asp Val Phe Val 100 105 110 Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Cys Pro Leu 120 115 125

```
His Tyr Glu Thr Ile Met Ser Ser Gly Asn Cys Val Leu Met Val Gly
                        135
Val Ser Trp Ala Thr Gly Ile Leu Phe Gly Ala Leu Tyr Thr Ala Gly
                    150
Thr Phe Ser Met Pro Phe Cys Gly Ser Met Val Ile Pro Gln Phe Phe
                165
                                    170
Cys Asp Val Pro Ser Leu Leu Arg Ile Ser Cys Ser Asp Thr Leu Val
                                185
Val Ile Tyr Ile Ser Leu Gly Ile Gly Phe Cys Leu Gly Met Val Cys
Ile Ile Cys Val Val Leu Ser Tyr Phe Tyr Ile Phe Ser Thr Val Leu
                        215
Lys Ile Pro Thr Thr Lys Gly Gln Ser Lys Ala Phe Gly Thr Cys Ile
                    230
Pro His Leu Thr Val Phe Ser Val Phe Ile Ala Thr Ala Cys Phe Val
                                    250
Asn Leu Lys Pro Pro Ser Arg Ser Ala Ser Ile Ala Asp Ser Leu Phe
Ser Val Leu Tyr Thr Val Leu Pro Pro Ala Leu Asn Pro Val Ile Tyr
                            280
Ser Leu Arg Asn Thr Asp Val Lys Cys Ala Leu Arg Ser Leu Gln Lys
                        295
Ile Leu Cys Pro Arg Asp Ser Leu His Leu Arg Val Gln Ser Ile
```

<211> 310

<212> PRT

<213> Mus musculus

<400> 2532

Met Gln Ser Gly Asn Gln Thr Ser Val Ser His Phe Ile Leu Val Gly 10 Leu His His Pro Pro Gln Leu Gly Val Pro Leu Phe Leu Ala Phe Leu Val Ile Tyr Leu Leu Thr Val Ser Gly Asn Gly Leu Ile Ile Leu Thr 40 Val Leu Val Asp Ile Arg Leu His Arg Pro Met Tyr Trp Phe Leu Cys His Leu Ser Phe Leu Asp Leu Thr Ile Ser Ser Ala Ile Val Pro Lys 70 75 Met Leu Ser Gly Phe Leu Leu Asp Ser Arg Ile Ile Ser Phe Gly Gly 90 Cys Val Ile Gln Leu Phe Ser Phe His Phe Leu Gly Cys Thr Glu Cys 100 105 110 Phe Leu Tyr Thr Leu Met Ala Tyr Asp Arg Phe Leu Ala Ile Cys Lys 120 125 Pro Leu His Tyr Ala Thr Ile Met Thr Arg Ser Val Cys Asn Tyr Leu 135 140 Ala Leu Gly Thr Trp Ile Gly Gly Thr Ile His Ser Leu Phe Gln Thr 150 155 Ser Phe Ile Phe Arg Leu Pro Phe Cys Gly Pro Asn Arg Val Asp Tyr 170 165 Phe Phe Cys Asp Ile Pro Ala Val Leu Arg Leu Val Cys Ala Asp Thr 180 Thr Ile Asn Glu Leu Val Thr Phe Val Asp Ile Gly Phe Leu Ala Leu 200 Thr Cys Phe Met Leu Ile Leu Thr Ser Tyr Gly Tyr Ile Val Ala Ala

```
220
                        215
Ile Leu Arg Ile Arg Ser Ala Asp Gly Arg Arg Asn Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ala His Leu Thr Val Val Ile Val Tyr Tyr Val Pro Cys Thr
                                    250
Phe Ile Tyr Leu Arg Pro Gly Ser Gln Glu Pro Leu Asp Gly Val Val
                                265
                                                    270
Ala Val Phe Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Ile Ile Tyr
                            280
Thr Leu Arg Asn Lys Gln Met Lys Ala Ala Leu Arg Arg Leu Gly Gly
                        295
                                            300
Leu Arg Glu Val His Pro
<210> 2533
<211> 313
<212> PRT
<213> Mus musculus
<400> 2533
Met Arg Asn His Thr Ser Val Thr Glu Phe Ile Leu Leu Gly Ile Pro
                                    10
Thr Val Lys Glu Gly Leu Glu Ser Met Leu Phe Ala Leu Phe Leu Val
Phe Tyr Val Phe Ala Leu Leu Gly Asn Leu Leu Ile Phe Leu Thr Ile
                            40
Leu Ala Ser Pro Asn Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn
                        55
Leu Ala Val Phe Asp Ile Phe Phe Pro Ser Val Asn Ser Pro Lys Met
                                         75
                    70
Met Asp Tyr Leu Val Arg Gln Gly Arg Thr Ile Ser Tyr Gln Gly Cys
                                    90
Val Ser Gln Val Phe Phe Tyr His Thr Leu Gly Gly Thr Glu Cys Phe
            100
                                105
Leu Tyr Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro
                            120
Met Arg Tyr Thr Val Ile Met Asn His Arg Val Cys Thr Cys Leu Thr
                        135
                                            140
Leu Gly Thr Trp Val Gly Gly Phe Val His Gly Ser Ile Leu Thr Phe
                    150
                                        155
Leu Ile Phe Lys Leu Pro Tyr Cys Gly Pro Asn Lys Val Asn Ser Phe
                                    170
                165
Phe Cys Asp Ile Pro Val Val Leu Ser Leu Ala Cys Ala Asp Thr Ser
            180
                                185
                                                     190
Leu Ala Arg Thr Val Ser Phe Thr Asn Val Gly Val Val Ala Leu Thr
        195
                            200
Cys Phe Leu Leu Ile Leu Thr Ser Tyr Thr Arg Ile Val Ile Ser Ile
                        215
Leu Lys Ile Arg Ser Ser Glu Gly Arg Arg Ala Phe Ser Thr Cys
                    230
                                         235
Ser Ala His Leu Thr Ser Ile Ile Leu Val Tyr Gly Pro Val Ile Leu
                                    250
                                                         255
                245
Val Tyr Leu Arg Pro Ala Ser Ser Pro Trp Leu Asp Ser Val Val Gln
                                265
                                                     270
            260
Val Phe Asn Asn Val Ile Thr Pro Ser Leu Asn Pro Leu Ile Tyr Thr
                            280
                                                 285
Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Lys Lys Val Val Ser Gln
    290
                        295
                                            300
```

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305
<210> 2534
<211> 314
<212> PRT
<213> Mus musculus
<400> 2534
Met Glu Val Cys Asn Ser Thr Leu Arg Ser Gly Phe Ile Leu Met Gly
                                   10
Ile Leu Asp Asp Asn Asp Phe Pro Glu Leu Leu Cys Ala Thr Ile Thr
          20
                               25
Ala Leu Tyr Leu Leu Ala Leu Thr Ser Asn Gly Leu Leu Leu Val
                           40
Ile Thr Met Asp Ala Arg Leu His Val Pro Met Tyr Leu Leu Leu Trp
                       55
Gln Leu Ser Leu Met Asp Leu Leu Leu Thr Ser Val Ile Thr Pro Lys
                   70
                                       75
Ala Ile Leu Asp Tyr Leu Leu Lys Asp Asn Thr Ile Ser Phe Gly Gly
                                   90
               85
Cys Ala Leu Gln Met Phe Leu Ala Leu Thr Leu Gly Thr Ala Glu Asp
           100
                                                  110
                               105
Leu Leu Ser Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                          120
Pro Leu Asn Tyr Thr Ile Leu Met Ser Gln Lys Val Cys Cys Leu Met
                       135
                                           140
Ile Ala Thr Ser Trp Ser Leu Ala Ser Leu Ser Ala Leu Gly Tyr Ser
                   150
                                       155
Met Tyr Thr Met Gln Tyr Pro Phe Cys Lys Ser Arg Gln Ile Arg His
                                   170
                                                       175
               165
Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr
           180
                              185
Ser Thr Tyr Glu Leu Met Val Tyr Leu Met Gly Val Thr Leu Leu Phe
                                              205
       195
                           200
Pro Ala Leu Ala Ala Ile Leu Ala Ser Tyr Ser Leu Ile Leu Phe Thr
                                           220
                       215
Val Leu His Met Pro Ser Asn Glu Gly Arg Arg Lys Ala Leu Val Thr
                   230
                                       235
Cys Ser Ser His Leu Thr Val Val Gly Met Trp Phe Gly Gly Ala Ile
                                   250
               245
Val Met Tyr Val Leu Pro Ser Ser Phe His Ser Pro Lys Gln Asp Asn
           260
                               265
Ile Ser Ser Val Phe Tyr Thr Ile Phe Thr Pro Ala Leu Asn Pro Leu
                          280
                                              285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Arg Arg Val
                   295
Leu Gly Lys Ser Leu Val Ser Thr Val Tyr
                   310
<210> 2535
<211> 315
<212> PRT
<213> Mus musculus
<400> 2535
```

Met Tyr Thr Trp Asn His Thr Asn Met Pro Asp Phe Ile Leu Met Gly

Gly Ala Gln Pro Leu Gly Tyr Lys Glu

```
Leu Thr Asp Ser Lys Glu Ile Gln Leu Ile Leu Ser Val Leu Phe Leu
Leu Ile Tyr Leu Val Thr Val Leu Gly Asn Ile Gly Met Ile Leu Ile
                            40
Ile Tyr Ile Asp Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                        55
His Leu Ser Val Val Asp Leu Ser Tyr Ser Thr Ala Ile Thr Pro Lys
                    70
                                        75
Thr Leu Glu Asn Met Leu Thr Thr Asn Lys Ser Ile Ser Tyr Thr Asn
                                    90
               8.5
Cys Phe Ala Gln Leu Tyr Ile Phe Ile Leu Leu Ala Ala Thr Glu Cys
                                105
           100
Phe Leu Leu Ser Ser Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys Asn
                            120
        115
Pro Leu His Tyr Pro Val Ile Met Ser Pro Arg Cys Cys Leu Ala Leu
                        135
                                            140
Leu Thr Gly Ser Tyr Val Ile Gly Ala Val Asp Ser Thr Leu Thr Val
                    150
                                        155
Phe Ser Met Ile Thr Leu His Phe Cys Lys Ser Asn Val Ile Arg His
                                    170
                165
Phe Tyr Cys Asp Thr Ser Pro Leu Leu Ser Leu Ser Cys Ser Asp Thr
            180
                                185
                                                    190
His Val Val Glu Ile Ile Ile Phe Ile Phe Ala Gly Ser Thr Ile Leu
        195
                            200
Gly Ser Leu Ile Thr Ile Ser Gly Ser Tyr Val Ser Ile Leu Ser Thr
                                            220
                        215
Ile Leu Asn Ile Asn Ser Thr Ser Gly Lys Gln Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Leu Gly Val Thr Val Phe Tyr Ser Thr Leu Ile
                                    250
                245
Phe Thr Tyr Leu Lys Pro Thr Lys Ser Tyr Ser Leu Gly Lys Glu Glu
                                265
            260
Val Ala Ser Val Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Val Val Arg Leu
                        295
Val Lys Thr Arg Gln Gly Ser Arg Lys Leu Ile
                    310
<210> 2536
<211> 317
<212> PRT
<213> Mus musculus
<400> 2536
Met Lys Ala Tyr Ser Glu Ala Lys His Asn Gly Thr Glu Ala Thr Glu
Phe Ile Leu Leu Gly Leu Ser Thr Arg Pro Glu Leu Gln Pro Ile Leu
                                25
```

Phe Leu Val Phe Leu Thr Ile Tyr Leu Ile Thr Leu Thr Gly Asn Phe

Gly Met Ile Leu Leu Ile Arg Phe Thr Pro Gln Leu Gln Thr Pro Met

Tyr Phe Phe Leu Thr His Leu Ala Cys Val Asp Ile Phe Tyr Ser Thr

Asn Val Ser Pro Gln Met Leu Val Asn Phe Leu Ser Glu Lys Lys Thr

75

90

95

55

```
Ile Ser Tyr Ile Gly Cys Leu Thr Gln Cys Phe Val Phe Val Thr Leu
                                105
Leu Leu Thr Glu Tyr Tyr Met Leu Gly Ala Met Ala Tyr Asp Arg Tyr
                                                125
                            120
Met Ala Ile Cys Lys Pro Leu His Tyr Ser Thr Lys Met Ser Arg Pro
                        135
Val Cys Ile Cys Leu Val Thr Phe Pro Tyr Phe Trp Gly Ser Met Val
                                        155
Gly Thr Met Gln Val Ile Leu Thr Ser Arg Leu Ser Phe Cys Gly Pro
                                    170
                165
Asn Thr Ile Asn His Phe Tyr Cys Ala Asp Pro Pro Leu Leu Met Leu
                                185
Thr Cys Ser Asp Thr Tyr Ile Lys Gln Thr Ala Leu Phe Val Ser Ala
                            200
Gly Ile Asn Leu Thr Gly Ser Leu Leu Ile Ile Leu Ile Ser Tyr Ile
                        215
Phe Ile Phe Ile Thr Ile Met Arg Ile Arg Ser Ser Glu Gly Gln Arg
                    230
                                        235
Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr Ala Val Thr Met Phe
                                    250
Tyr Gly Ser Leu Phe Cys Met Tyr Leu Arg Pro Ala Asn Glu Arg Ser
Val Glu Gln Gly Lys Ile Ile Ala Val Phe Cys Ile Phe Val Ser Pro
                            280
Met Val Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gln
                        295
                                            300
Ala Leu Arg Arg Val Phe Ile Arg Asn Leu Cys Lys Val
                    310
<210> 2537
<211> 314
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<400> 2537

Met Glu Glu Lys Asn Gln Thr Val Met Pro Glu Phe Leu Phe Arg Gly Ile Thr Asp Asn Leu His Gln Lys Ile Val Ile Phe Ile Ile Phe Phe Phe Val Tyr Leu Val Thr Leu Gly Gly Asn Val Gly Met Ile Thr Leu 40 Ile Trp Leu Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Gln Leu Ser Phe Val Asp Val Ser Ser Ser Ser Ile Ala Pro Lys 70 Met Leu Cys Asp Ile Phe Ala Arg Asn Lys Ala Ile Ser Phe Val Gly 90 Cys Ala Thr Gln Met Trp Phe Phe Gly Leu Phe Val Ala Thr Glu Cys 105 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys 120 Pro Leu Leu Tyr Thr Leu Ile Met Ser Pro His Leu Cys Met Leu Leu 135 140 Val Val Gly Ile Tyr Phe Ile Ala Leu Ile Ser Thr Met Ile His Thr 150 155 Thr Leu Thr Phe Cys Leu Pro Phe Cys Gly Pro Tyr Ile Ile Asn His 165 170 Phe Phe Cys Asp Val Ser Pro Leu Leu Ser Leu Ala Cys Thr Asp Thr

<212> PRT

<213> Mus musculus

```
180
                                185
Gln Met Ile Lys Leu Val Phe Phe Val Leu Ala Gly Thr Val Gly Met
                                                205
       195
                            200
Phe Thr Gly Leu Ile Ile Leu Gly Ser Tyr Val Cys Ile Leu Lys Ala
                        215
                                            220
Ile Leu Lys Ile Gln Thr Ala Asn Gly Arg Gln Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Leu Val Thr Val Ala Ile Leu Tyr Gly Thr Leu Phe
                245
                                    250
Phe Ile Tyr Val Arg Pro Asn Ala Ser Ser Leu Asn Ile Asn Lys
                                265
Val Ile Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
        275
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Asn Ala Phe Arg Arg Thr
   290
                        295
                                            300
Leu Lys Lys His Phe Leu Ile Gly Val
                    310
<210> 2538
<211> 315
<212> PRT
<213> Mus musculus
<400> 2538
Met Glu Ile Glu Asn His Thr Leu Ile Thr Lys Phe Leu Ile Leu Gly
                                    10
                                                        15
Leu Ser Asp Asp Pro Glu Leu Gln Pro Ile Leu Phe Gly Leu Phe Leu
            20
                                25
                                                    30
Ser Met Tyr Leu Val Thr Leu Leu Gly Asn Leu Leu Ile Ile Leu Ala
       35
                            40
Val Ser Ser Asp Ser His Leu His Lys Pro Met Tyr Phe Leu Leu Ser
                        55
                                            60
Asn Leu Ser Phe Ile Asp Ile Cys Phe Ile Ser Thr Thr Ile Pro Lys
                    70
                                        75
                                                            80
Met Leu Val Asn Met Gln Ser Gln Ile Lys Asp Ile Ser Tyr Ile Glu
                                    90
Cys Leu Thr Gln Val Phe Phe Phe Asn Ile Phe Ala Gly Met Asp Asn
                                105
Phe Leu Leu Thr Leu Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
                            120
                                                125
Pro Leu Asn Tyr Thr Val Ile Met Asn Pro Arg Leu Cys Ala Leu Leu
                        135
                                            140
Ile Leu Met Phe Trp Ile Ile Met Phe Trp Val Ser Leu Ile His Val
                    150
                                        155
Leu Leu Met Asn Glu Leu Asn Phe Ser Arg Gly Thr Glu Ile Pro His
                                    170
                165
                                                        175
Phe Phe Cys Glu Leu Ala Gln Val Leu Lys Val Ser Asn Ser Asp Asn
            180
                                185
                                                    190
His Val Asn Asn Val Phe Met Tyr Val Val Thr Ser Leu Leu Gly Val
                            200
                                                205
Ile Pro Met Thr Gly Ile Leu Met Ser Tyr Ser Gln Ile Phe Ser Ser
                        215
                                            220
Leu Phe Arg Met Ser Ser Thr Val Ser Lys Tyr Lys Ala Phe Ser Thr
                                        235
                    230
Cys Gly Ser His Leu Cys Val Val Thr Leu Phe Tyr Gly Ser Gly Phe
               245
                                    250
Gly Val Tyr Phe Ser Ser Ser Val Val His Ser Thr Gln Arg Arg Lys
```

Val Ala Ser Leu Met Tyr Thr Val Ile Ser Pro Met Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Gly Lys Leu 295 Phe Asn Arg Val Ala Ser Ser Pro Ser Cys Ile 310 <210> 2539 <211> 318 <212> PRT <213> Mus musculus <400> 2539 Met Lys Asn Gln Ser Val Glu Ile Ile Phe Ile Leu Leu Gly Leu Thr 10 Asp Asp Pro Gln Leu Gln Ile Leu Ile Phe Leu Phe Leu Phe Asn 25 Tyr Ile Leu Ser Leu Met Gly Asn Leu Val Ile Ile Leu Leu Thr Leu Leu Asp Pro Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Phe Leu Glu Ile Ala Phe Thr Thr Ala Cys Ile Pro Arg Phe Leu Met Ser Ile Leu Thr Gly Asp Arg Thr Ile Ser Tyr Asn Ala Cys Ala Ala Gln Phe Phe Phe Ser Leu Leu Leu Val Thr Glu Phe Tyr Leu 100 105 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu 120 125 His Tyr Pro Ile Ile Met Asn Asn Arg Met Cys His Leu Leu Val Leu 130 135 140 Ser Cys Trp Val Thr Gly Phe Leu Ile Ile Leu Pro Pro Leu Val Leu 150 155 Gly Leu Lys Leu Asp Phe Cys Ala Ser Lys Thr Ile Asp His Phe Leu 165 170 175 Cys Asp Thr Ser Pro Leu Leu Gln Leu Ser Cys Thr Asp Thr His Phe 180 185 190 Met Glu Leu Met Ala Phe Val Ile Ala Leu Met Thr Leu Val Ile Thr 200 Leu Ile Leu Val Ile Leu Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu 215 220 Lys Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser 230 235 Ser His Met Val Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met 250 Tyr Met Lys Thr Ser Ala Lys Glu Arg Val Ala Leu Asn Lys Gly Val 265 270 Ser Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr 280 Thr Leu Arg Asn Gln Gln Val Lys Asp Ala Phe Lys Gln Val Leu His Arg Leu Tyr Ser His Asn Ser Glu Leu Arg Phe Arg Pro Lys 305 310

<210> 2540

<211> 312

<212> PRT

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<400> 2540
Met Arg Asn His Thr Ser Ile Thr Thr Phe Ile Leu Leu Gly Leu Thr
Asp Asp Pro Gln Leu Gln Val Leu Leu Phe Ile Phe Leu Phe Ile Thr
Tyr Leu Leu Ser Val Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Thr
Val Asp Pro Tyr Leu Lys Thr Pro Met Tyr Phe Phe Leu Gln Asn Phe
Ser Phe Leu Glu Ile Ser Phe Thr Ser Ala Cys Val Pro Arq Phe Leu
                                         75
Tyr Ser Ile Ser Thr Gly Asp Arg Thr Ile Thr Tyr Asn Ala Cys Ala
Thr Gln Leu Phe Phe Thr Asp Leu Phe Gly Val Thr Glu Phe Phe Leu
            100
                                105
Leu Ala Ile Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
His Tyr Met Thr Ile Met Asn Asn Lys Val Cys Arg Ile Met Val Ile
                        135
                                             140
Ser Cys Trp Met Ala Ala Phe Met Ile Ile Leu Pro Pro Leu Ser Leu
                    150
                                         155
Gly Phe His Leu Glu Phe Cys Asp Ser Asn Ile Ile Asp His Phe Gly
                165
                                    170
Cys Asp Ala Asn Pro Ile Leu Lys Ile Ser Cys Ser Asp Thr Trp Leu
            180
                                185
                                                     190
Ile Glu Gln Met Val Ile Gly Ser Ala Val Leu Thr Phe Ile Ile Thr
        195
                            200
                                                 205
Leu Leu Cys Val Val Phe Ser Tyr Met Tyr Ile Ile Arg Thr Val Leu
                        215
                                             220
Lys Phe Pro Ser Ala Gln Gln Lys Arg Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile
                                    250
Tyr Val Lys Pro Ser Ala Lys Glu Ala Val Thr Ile Asn Lys Gly Val
                                265
                                                     270
Ser Val Leu Ile Ser Ser Ile Ser Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Thr Leu Arg Asn Lys Gln Val Lys Gln Ala Ser Gln Asp Leu Ile Lys
Lys Ile Ala Phe Leu Leu Lys Lys
305
<210> 2541
<211> 313
<212> PRT
<213> Mus musculus
<400> 2541
Met Lys Asn Gln Ser Met Glu Ile Leu Ile Leu Gly Leu Thr Asp
Asp Pro Gln Leu Gln Ile Val Val Phe Leu Phe Leu Phe Leu Asn Tyr
Val Met Ser Leu Val Gly Asn Leu Ile Ile Val Leu Leu Thr Leu Leu
                            40
Asp Pro Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe Ser
```

```
Phe Leu Glu Ile Met Phe Thr Thr Val Cys Ile Pro Arg Phe Leu Thr
Thr Ile Val Thr Gly Asp Lys Thr Ile Thr Tyr Asn Asn Cys Ala Ala
                8.5
                                    90
Gln Leu Phe Phe Ile Leu Leu Gly Val Thr Glu Phe Tyr Leu Leu
            100
                                105
                                                    110
Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His
                            120
Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Gln Leu Val Leu Ser
                        135
Ser Trp Val Thr Gly Phe Leu Ile Ile Phe Pro Pro Leu Ala Met Gly
                    150
Leu Lys Leu Asp Phe Cys Asp Ser Arg Ile Ile Asp His Phe Met Cys
                                    170
Glu Thr Ser Pro Ile Leu Gln Ile Ser Cys Thr Asp Thr His Val Leu
Glu Met Met Ser Phe Val Leu Ala Val Val Thr Leu Val Val Thr Leu
        195
                            200
Val Leu Val Ser Leu Ser Tyr Ser Phe Ile Ile Lys Thr Ile Met Ser
                        215
Phe Pro Ser Ala Gln Gln Arg Thr Lys Ala Phe Ser Thr Cys Thr Ser
                    230
                                        235
His Met Phe Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met Tyr
                                    250
Ile Lys Pro Ser Ala Arg Glu Arg Val Ser Val Ser Lys Gly Val Ala
                                                    270
                                265
Leu Leu Tyr Thr Ser Ile Ala Pro Leu Leu Asn Pro Phe Ile Tyr Thr
                            280
Leu Arg Asn Gln Gln Val Lys Glu Val Phe Trp Asp Val Leu Gln Lys
                        295
Thr Leu Gly Phe Ser Lys His Lys Phe
                    310
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 2542

 Met
 Glu
 Lys
 Glu
 Asn
 Gln
 Thr
 Ser
 Val
 Ser
 Glu
 Phe
 Leu
 Leu
 Leu
 Gly
 Leu
 His
 Gln
 Gly
 Leu
 Leu
 Phe
 Ala
 Leu
 Phe
 Leu
 Leu
 Phe
 Leu
 Phe
 Ala
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 Ala
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 Phe
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 Ala
 Leu
 Phe
 Leu
 Ala
 Leu
 Ala
 Leu
 Ala
 Ala
 Thr
 Leu
 Ala
 Ala
 Thr
 Leu
 Ala
 Ala
 Thr
 Leu
 Ala
 Ala</th

```
150
                                        155
145
Leu Met Met Ala Arg Leu His Phe Cys Ser Glu Asn Ile Ile His His
                165
                                    170
Phe Phe Cys Asp Ile Asn Ser Leu Leu Pro Leu Ser Cys Ser Asp Thr
                                185
           180
Ser Leu Asn Gln Leu Met Val Leu Ser Val Val Gly Leu Ile Phe Val
                            200
Val Pro Ser Val Cys Ile Leu Ala Ser Tyr Gly Arg Ile Val Ser Ala
                        215
Val Met Lys Ile Thr Ser Met Glu Gly Lys Leu Lys Ala Phe Ser Thr
                                        235
                    230
Cys Gly Ser His Leu Ala Leu Val Ile Leu Phe Tyr Gly Ala Ile Ala
                245
                                    250
Gly Ile Tyr Met Ser Pro Ser Ser Asn His Ser Thr Glu Lys Asp Ser
            260
                                265
Ala Ala Ser Val Ile Phe Met Val Val Ala Pro Val Leu Asn Pro Phe
        275
                            280
Ile Tyr Ser Leu Arg Asn Asn Glu Leu Lys Gly Thr Leu Lys Lys Thr
                        295
Leu Gly Gln Ser Lys Ile Cys Ser Lys
                    310
<210> 2543
<211> 280
<212> PRT
<213> Mus musculus
<400> 2543
Leu Leu Thr Leu Met Gly Asn Leu Gly Ile Leu Val Val Ile Lys Val
                                    10
Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Asn His Leu Ser
                                25
Phe Leu Asp Ile Cys Tyr Ser Ser Val Phe Thr Pro Lys Leu Leu Gln
                            40
                                                45
Ile Leu Ile Met Glu Asp Gly Thr Ile Ser Phe Ile Gly Cys Met Ile
                        55
Gln Phe Phe Ile Cys Thr Phe Val Ile Thr Glu Ile Phe Met Leu
Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val Cys Asn Pro Leu Tyr
                85
                                    90
Tyr Thr Leu Ile Val Met Pro Ile Gln Phe Cys Ala Leu Leu Val Ala
           100
                                105
                                                    110
Gly Thr Tyr Met Ile Ser Gly Leu Cys Thr Leu Ile Ile Leu Tyr Thr
        115
                            120
                                                125
Leu Leu Gln Leu Cys Tyr Phe Glu His Gly Ile Ile Asn His Phe Gly
                        135
                                            140
Cys Glu Tyr Ser Ala Val Ile Ser Val Ser Cys Ser Asp Ser Ser Phe
                    150
                                        155
```

Ser Gln Leu Ile Cys Leu Val Met Ser Ile Ala Ser Glu Phe Ser Ser

Val Leu Ile Thr Leu Ala Ser Tyr Val Phe Ile Val Val Thr Ile Ile 180 185 190 Lys Met Pro Ser Lys Gly Gly Leu Gln Lys Ala Phe Ser Thr Cys Thr 195 200 205 Ser His Leu Thr Ala Ile Thr Ile Phe His Gly Ile Leu Leu Leu Leu

Tyr Cys Ile Pro Asn Ser Asn Ser Ser Arg Leu Phe Val Lys Val Ala

215

230

170

220

235

Thr Ala Leu Tyr Thr Ile Met Ile Pro Met Leu Asn Pro Leu Ile Tyr 245 Ser Leu Arg Asn Lys Asp Val Lys Asp Thr Val Arg Arg Leu Ile Ser 260 265 Ser Lys Leu His Ser His Leu Thr <210> 2544 <211> 313 <212> PRT <213> Mus musculus <400> 2544 Leu Tyr Ser Ile Gln Glu Asn Gln Ser Ser Thr Val Thr Phe Ile Leu Val Gly Phe Ser Glu Tyr Pro Asp Ile Gln Leu Pro Leu Phe Leu Leu 20 25 Phe Leu Thr Ile Tyr Thr Val Thr Val Leu Gly Asn Leu Gly Met Ile 40 Ala Ile Ile Arg Leu Ser Pro Lys Leu His Thr Pro Met Tyr Phe Phe 55 Leu Ser His Leu Ser Phe Val Asp Phe Cys Tyr Ser Thr Val Val Thr 70 75 Pro Lys Leu Leu Glu Asn Leu Ile Val Glu Asp Arg Arg Ile Ser Phe 85 Thr Gly Cys Val Met Gln Phe Phe Phe Val Cys Ile Phe Val Val Thr 100 105 Glu Thr Phe Met Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val 115 120 Cys Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Gln Lys Leu Cys Trp 135 Ser Leu Val Ala Gly Ser Tyr Ser Trp Gly Ile Ile Cys Ser Phe Val 150 Phe Ile His Phe Met Leu Thr Leu Val Phe Cys Gly Thr Lys Phe Ile 170 165 Asn Asn Phe Val Cys Glu His Asp Ala Ile Val Ala Val Ser Cys Ser 185 Asp Pro Phe Ile Ser Gln Lys Val Ile Phe Ile Phe Ala Thr Phe Asn 195 200 Glu Leu Ser Ser Leu Met Ile Ile Leu Thr Ser Tyr Val Phe Ile Val 215 Ile Thr Val Met Lys Met Pro Thr Thr Gly Gly Arg Tyr Lys Val Phe 235 230 Ser Thr Cys Ala Ser His Leu Thr Thr Ile Thr Ile Phe His Ser Ile 250 Ile Ile Cys Leu Tyr Cys Val Pro Thr Thr Lys Ser Ser Trp Leu Leu 270 265 Val Met Val´Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn 280 Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Val Lys 295 300 Lys Leu Met Cys Ser Ser Leu Ser Ser 310

<210> 2545 <211> 312 <212> PRT

```
<400> 2545
Gln Leu Arg Asp Arg Gly Asn Gln Thr Asn Ser Val Ile Phe Ile Leu
                                    10
Leu Gly Phe Ser Glu Tyr Pro Asp Leu Gln Val Pro Leu Phe Phe Val
                                25
Phe Leu Ile Ile Tyr Thr Ile Thr Val Leu Gly Asn Leu Gly Met Ile
Gly Ile Ile Arg Ile Asn Thr Lys Leu Arg Ser Thr Pro Met Tyr Phe
                        55
Phe Leu Ser His Leu Ser Phe Val Asp Phe Cys Tyr Ser Thr Val Val
                    70
                                         75
Thr Pro Lys Leu Leu Glu Asn Leu Ile Ile Glu Asp Arg Thr Ile Ser
                                    90
Phe Ser Gly Cys Ile Ile Gln Phe Phe Phe Ala Cys Thr Phe Val Val
                                105
                                                     110
            100
Thr Glu Thr Tyr Met Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala
                            120
                                                 125
Val Cys Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Pro Lys Leu Cys
                        135
Ser Ile Leu Val Gly Ala Ser Tyr Ser Trp Gly Leu Ile Cys Ser Leu
                                         155
                    150
Thr Leu Thr Tyr Phe Leu Leu Arg Leu Ser Phe Gln Gly Ile Asn Ile
                                    170
Ile Asn Asn Phe Val Cys Glu His Ala Ala Ile Val Ala Val Ser Cys
                                185
                                                     190
Ser Asp Pro Tyr Ile Ser Gln Glu Ile Ile Phe Val Ser Ala Ser Phe
                            200
                                                 205
Asn Glu Ile Ser Ser Leu Ile Ile Ile Leu Thr Ser Tyr Val Phe Ile
Phe Ile Thr Val Met Lys Met Ser Ser Ile Gly Gly Arg Ser Lys Ala
                                         235
                    230
Phe Ser Thr Cys Ala Ser His Leu Thr Ala Ile Ile Ile Phe His Gly
                245
                                    250
Thr Ile Leu Phe Leu Tyr Cys Val Pro Asn Thr Lys Ser Ser Trp Leu
                                                     270
Met Val Lys Val Ala Ser Val Phe Tyr Thr Val Phe Ile Pro Met Leu
        275
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ser Val
                                             300
                        295
Arg Lys Leu Val Thr Lys Ser Leu
305
                    310
<210> 2546
<211> 312
<212> PRT
<213> Mus musculus
<400> 2546
Met Glu Pro Gly Asn Gln Thr Gly Ala Tyr Tyr Phe Tyr Leu Thr Glu
                                    10
Leu Thr Ser Asp Pro Thr Met Glu Leu Leu Ile Phe Ser Leu Phe Leu
            20
                                                     30
Phe Ile Tyr Leu Val Thr Ile Leu Gly Asn Leu Leu Ile Ile Ile Ala
        35
                            40
                                                 45
Val Ser Ser Asp Ser His Leu Gln Thr Pro Met Tyr His Phe Leu Ser
                        55
                                             60
```

```
Lys Leu Ser Phe Ala Asp Ile Cys Leu Ser Thr Thr Thr Ile Pro Asn
                 70
Met Leu Lys Asn Ile His Thr Gln Asp Gln Ser Ile Ser Tyr Thr Gly
          85
                               90
Cys Leu Ile Gln Ala Cys Phe Val Leu Asn Phe Ala Leu Val Glu Ser
         100
                           105
Cys Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys His
                       120
 115
                                        125
Pro Leu Asn Tyr Thr Val Ile Met Asn Pro His Phe Cys Asp Leu Leu
                   135
                                     140
Ile Leu Leu Ser Leu Ile Ile Ser Ile Val Asn Ser Leu Leu Gln Cys
                                  155
     150
Leu Met Ile Leu Arg Leu Ser Phe Cys Thr Asn Asn Glu Leu Pro Leu
     165
                               170
Phe Phe Cys Glu Leu Ala Gln Val Ile Lys Leu Ala Cys Ser Asp Thr
                          185
         180
                                             190
Leu Ile Asn Tyr Ile Leu Ile Tyr Leu Ala Thr Phe Ile Phe Gly Gly
                        200
195
Ile Pro Ile Phe Gly Ile Ile Phe Ser Tyr Thr Arg Ile Val Ser Ser
                                   220
                   215
Ile Leu Lys Ile Ser Ser Leu Arg Gly Lys Tyr Lys Ala Phe Ser Thr
                230
                               235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Ala Gly Val
                               250
                                                255
             245
Gly Val Tyr Ile Ser Ser Ser Ile Ala Val Phe Pro Gln Thr Thr
         260
                           265
Val Ser Tyr Ile Met Tyr Thr Val Leu Pro Gln Met Leu Asn Pro Phe
                                         285
275 280
Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Ala Leu Arg Lys Leu
290 295
Ile Ala Lys Glu Ser Arg Leu Pro
                 31Ō
```

```
<210> 2547
```

<400> 2547

| Val 1 | Leu | Leu | Asn | His 5 | Thr | Phe | Ile | Thr | Glu 10 | Phe | Leu | Leu | Leu | Gly 15 | Val |
|-----------|------------|------------|------------|-----------|-----------|-----|-----------|------------|-----------|-----------|------------|------------|------------|-----------|-----------|
| Thr | Asp | Ile | Gln 20 | Glu | Leu | Asn | Pro | Ile 25 | | Phe | Val | Met | Val 30 | Leu | Ala |
| Met | Tyr | Phe 35 | Ile | Asn | Val | Phe | Gly 40 | Asn | Gly | Ala | Ile | Met 45 | Met | Ile | Val |
| Ile | Leu 50 | Asp | Ser | Arg | Leu | | | | Met | | Phe 60 | Phe | Leu | Gly | Asn |
| Leu 65 | Ala | Cys | Leu | Asp | Ile 70 | Суѕ | Phe | Ser | Thr | Val 75 | Thr | Val | Pro | Lys | Met 80 |
| Leu | Glu | Asn | Phe | Phe 85 | Ser | Thr | Ser | Lys | Ala 90 | Ile | Ser | Phe | Leu | Gly 95 | Суѕ |
| Ile | Thr | Gln | Leu 100 | His | Phe | Phe | His | Phe 105 | Leu | Gly | Суѕ | Thr | Asp 110 | Ala | Leu |
| Leu | Leu | Thr 115 | Val | Met | Ala | Phe | | | Phe | | Ala | Ile 125 | Суѕ | Arg | Pro |
| Leu | His 130 | Tyr | Pro | Ser | Ile | | Asn | _ | | Val | Cys 140 | Ile | Gln | Val | Ala |
| Ala | Thr | Ile | Trp | Ala | Ile | Pro | Phe | Leu | His | Ala | Leu | Val | His | Ser | Ile |

<211> 309

<212> PRT

<213> Mus musculus

```
150
                                        155
145
Met Thr Ser Gln Leu Asn Phe Cys Gly Ser Asn Arg Ile His His Phe
                165
                                    170
Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu
                                185
            180
                                                    190
Leu Asn Arg Trp Leu Leu Asn Thr Leu Ala Gly Thr Ile Gly Ile Gly
        195
                            200
Leu Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Val Thr Tyr Leu
                        215
Phe Leu Lys Thr His Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr
                    230
                                        235
Cys Ala Ser His Phe Met Val Val Met Ile Phe Tyr Ala Pro Val Leu
                245
                                    250
Phe Ile Tyr Ile Asn Pro Asp Ser Gly Ser Ser Leu Glu Lys Asp Arg
                                265
                                                   270
Ile Ile Ala Val Met Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
                                                285
                            280
Ile Tyr Ala Leu Arg Asn Lys Glu Val Arg Cys Ala Leu Asn Arg Lys
                        295
Leu Arg Ile Leu Ile
305
<210> 2548
<211> 305
<212> PRT
<213> Mus musculus
<400> 2548
Met Arg Asn His Ser Ala Val His Glu Phe Val Leu Leu Gly Leu Ser
                5
                                    10
Thr Asp Pro His Ile Gln Pro Ala Leu Phe Val Leu Phe Leu Leu Val
                                25
            20
Tyr Leu Leu Thr Val Val Gly Asn Ser Leu Met Leu Leu Val Ile Val
                            40
                                               4.5
Ala Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Arg Gln Leu
                        55
Ser Phe Leu Asp Leu Cys His Ser Ser Val Thr Ala Pro Lys Met Leu
                   70
                                       75
Glu Asn Leu Leu Ser Glu Glu Lys Thr Ile Leu Val Glu Ser Cys Leu
               8.5
                                    90
Ala Gln Ala Phe Phe Val Phe Ala Thr Gly Gly Thr Glu Ala Cys Leu
           100
                               105
                                                    110
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Gly Ser Pro Leu
        115
                           120
                                                125
Leu Tyr Ser Gln Val Met Ser Ser Gln Leu Cys Val Gly Leu Val Trp
    130
                        135
                                           140
Leu Ser Trp Cys Leu Ala Val Val Asp Ala Leu Leu Asn Thr Leu Pro
                    150
                                        155
Ala Val Ser Leu Asp Phe Cys Glu Asp Gln Thr Ile Ser His Phe Ser
                165
                                    170
```

Cys Glu Leu Ser Ser Leu Phe Pro Leu Ser Cys Ser Asp Thr Ala Ala

Asn Phe Thr Leu Leu Cys Ser Ser Val Val His Phe Phe Gly Thr

Leu Val Met Ile Val Cys Ser Tyr Gly Arg Ile Val Thr Thr Val Leu

Arg Val Ser Ser Ser Thr Gly Arg Ser Lys Ala Phe Ser Thr Cys Leu

```
Ser His Leu Thr Thr Val Ile Leu Phe Tyr Gly Ser Gly Phe Ile Ser
Tyr Leu Leu Pro Ala Ser Gly Ser Pro Leu Glu Lys Val Phe Ser Leu
                                265
Gln Tyr Ser Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu
                            280
Lys Asn Lys Glu Val Lys Ala Ala Leu Gly Arg Met Ile Arg Lys His
Phe
305
<210> 2549
<211> 311
<212> PRT
<213> Mus musculus
<400> 2549
Met Ala Trp Ser Asn His Ser Val Ile Thr Glu Phe Val Leu Thr Gly
                                    10
Leu Ser Asp Asp Pro Leu Ile Gln Ala Leu Leu Phe Ala Leu Phe Leu
            20
                                25
Gly Ile Tyr Val Leu Thr Met Thr Gly Asn Leu Thr Met Leu Leu Val
                            40
                                                45
Ile Thr Ala Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                                            60
                        55
Asn Leu Ser Phe Leu Asp Leu Cys Phe Ser Ser Val Thr Val Pro Lys
                    70
                                        75
Leu Leu Lys Asp Leu Leu Ser Ala Lys Lys Thr Ile Ser Val Glu Gly
               85
                                    90
Cys Leu Ala Gln Val Phe Phe Val Phe Ile Thr Ala Gly Thr Glu Ala
                                105
           100
                                                    110
Phe Leu Leu Ser Met Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys His
       115
                            120
                                                125
Pro Leu Leu Tyr Gly Gln Met Met Ser Asn Glu Leu Cys Leu Lys Leu
                        135
                                            140
Val Leu Leu Ser Trp Gly Leu Ala Ser Leu Ser Ser Val Val Ile Val
                   150
                                        155
Leu Leu Ala Val Asn Leu Asp Phe Cys Glu Ala Tyr Thr Ile His His
                                    170
                165
Tyr Thr Cys Glu Leu Pro Ser Leu Phe Pro Leu Ser Cys Ser Asp Ile
                                185
            180
                                                    190
Ser Ile Asn Val Asp Ile Leu Ile Cys Ser Thr Leu Leu His Gly Leu
       195
                            200
                                                205
Gly Thr Phe Leu Pro Ile Phe Phe Ser Tyr Ala Arg Ile Val Ser Thr
                        215
                                            220
Val Leu Ser Met Glu Ser Thr Thr Gly Arg Ser Lys Ala Phe Asn Thr
                    230
                                        235
Cys Ser Ser His Leu Ile Ala Val Val Leu Phe Phe Gly Ser Gly Leu
                245
                                    250
Ile Arg Tyr Leu Met Pro Thr Ser Gly Ser Ser Leu Asp Leu Leu Ser
                                265
                                                    270
Ser Leu Gln Tyr Ser Ala Val Thr Pro Met Leu Asn Pro Leu Ile Tyr
                                               285
                            280
Ser Leu Lys Asn Gln Glu Val Lys Ala Ala Val Arg Arg Thr Leu Gly
                        295
Lys Cys Leu Arg Tyr Leu Glu
```

```
<211> 316
<212> PRT
<213> Mus musculus
<400> 2550
Met Asn Met Thr Asn Asn Thr Met Val Thr Glu Phe Thr Leu Leu Gly
1
                                    10
Ile Pro Glu Thr Glu Gly Leu Glu Asn Val Leu Leu Phe Leu Phe Ser
Thr Leu Tyr Ala Cys Ala Leu Leu Gly Asn Leu Leu Leu Thr Ala
Val Thr Ser Ser Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Asn Leu Ser Ile Ser Asp Met Gly Phe Cys Ser Thr Thr Ala Pro Lys
                    70
                                        75
Met Leu Ser Tyr Leu Ser Gly Arg Gly Gly Gly Ile Ser Phe Gln Gly
                                    90
Cys Val Val Gln His Phe Phe Tyr His Cys Ile Gly Cys Val Leu Cys
            100
                                105
                                                    110
Phe Leu Tyr Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Phe
        115
                            120
Pro Leu Arg Tyr Thr Ile Ile Met Asn His Arg Val Cys Cys Val Leu
                        135
Ala Thr Gly Thr Trp Met Ser Gly Cys Val His Ala Thr Ile Leu Thr
                    150
                                        155
Cys Leu Thr Phe Gln Leu Pro Tyr Cys Gly Pro Ser Glu Val Ser Tyr
                165
                                    170
Tyr Phe Cys Asp Met Pro Ala Val Leu Leu Ala Cys Glu Asp Ser
                                185
Ser Leu Ala Gln Arg Val Gly Phe Thr Asn Val Gly Leu Leu Ser Leu
        195
                            200
Ile Cys Phe Phe Leu Ile Val Val Ser Tyr Thr Arg Ile Gly Ile Ser
                        215
                                            220
Ile Ser Lys Ile Arg Ser Thr Glu Gly Arg Gln Arg Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ala His Leu Thr Ala Ile Met Cys Val Tyr Gly Pro Val Ile
                245
                                    250
Val Ile Tyr Leu Gln Pro Asn Pro Ser Pro Leu Leu Ser Ala Ile Ile
                                265
Gln Ile Phe Asn Asn Leu Val Thr Pro Thr Ile Asn Pro Leu Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Leu Arg His Val Phe Leu
                        295
                                            300
Lys Arg Cys Leu Ser Leu Glu Val Asn Glu Asn Ile
                    310
<210> 2551
<211> 315
<212> PRT
<213> Mus musculus
<400> 2551
Leu Ser Pro Glu Asn Ser Ser Thr Ile Thr Glu Leu Val Leu Val Gly
1
                                    10
Phe Ser Asp Gln Pro Gln Thr Glu Leu Pro Leu Phe Val Phe Phe Ser
            20
                                25
```

```
Leu Val Tyr Leu Ala Ser Cys Leu Gly Asn Thr Ala Val Val Ile Leu
Val Ala Leu Asp Val Ser Leu Gln Thr Pro Met Tyr Phe Phe Leu Cys
                        5.5
                                            60
His Leu Ala Phe Leu Asn Gly Phe Phe Gly Thr Val Val Thr Pro Lys
                    70
Met Leu Phe Asn Phe Leu Ala Ser Arg Lys Val Ile Ser Tyr Pro Phe
                                    90
               8.5
Cys Leu Ala Gln Thr Tyr Leu Thr Leu Phe Leu Glu Ser Thr Glu Cys
                                105
Phe Leu Leu Ala Val Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Tyr
                            120
Pro Leu Arg Tyr Leu Leu Ile Met Ser Trp Ala Val Cys Ile Ala Leu
                        135
                                            140
Ala Val Ala Val Trp Val Thr Gly Phe Cys Ala Ser Val Leu Pro Leu
                    150
                                        155
Cys Phe Met Ile Leu Pro Leu Cys Gly Pro Tyr Val Val Asp Tyr Leu
                165
                                    170
                                                        175
Phe Cys Glu Leu Pro Ile Leu Leu His Leu Phe Cys Ala Asp Thr Ser
                                185
                                                    190
Leu Gln Glu Ala Met Met Ala Val Gly Gly Ala Gly Thr Val Leu Val
                                                205
                            200
Pro Phe Leu Leu Ile Ala Leu Ser Tyr Leu Arg Ile Leu Val Thr Val
                        215
                                            220
Ile Arg Ile Asp Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ala Ser His Leu Ala Val Val Thr Ile Tyr Tyr Gly Thr Gly Leu Ile
                245
                                    250
Arg Tyr Leu Arg Pro Lys Ser Leu Tyr Ser Ala Glu Gly Asp Lys Leu
                                265
                                                    270
Ile Ser Val Phe Tyr Ala Val Ile Gly Pro Ala Leu Asn Pro Phe Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Gln Gly Ala Val Arg Arg Val Val
                        295
Glu Arg Tyr Arg Lys Ser Pro Arg Ile Ala Phe
305
                    310
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 2552

Met Gly Asn His Ser Thr Val Thr Thr Phe Leu Leu Trp Gly Phe Ser 10 Ser Phe Pro Glu Leu His Asn Leu Leu Phe Val Val Ile Leu Leu Ser 25 20 His Val Thr Ile Leu Leu Ala Asn Ala Ser Ile Met Val Ala Ile Lys 40 Leu Asn His Asn Leu His Thr Pro Met Tyr Phe Phe Leu Phe Ala Leu 55 Ser Phe Ser Glu Thr Cys Thr Thr Met Val Ile Leu Pro Arg Met Leu 70 75 Val Asp Leu Leu Ser Glu Ser Lys Ala Ile Ser Leu Pro Glu Cys Ala 90 95 8.5 Thr Gln Met Phe Phe Phe Gly Leu Ala Ala Asn Asn Cys Phe Ile 105 Met Ala Ala Met Ser Tyr Asp Arg Tyr Thr Ala Ile His Ser Pro Leu

```
120
His Tyr His Ile Phe Met Thr Pro Lys Val Cys Ser Gln Leu Val Ile
                        135
                                             140
Ala Ser Cys Val Val Gly Phe Leu Cys Ser Leu Ser Ile Thr Phe Thr
145
                    150
                                         155
Ile Phe Asn Leu Ser Phe Cys Asp Ser Lys Thr Ile Gln His Phe Phe
                165
                                     170
                                                         1.75
Cys Asp Ile Ser Pro Leu Val His Leu Ala Cys Asp Tyr Thr Ala His
                                185
                                                     190
His Ala Met Ile Ile Phe Met Val Ser Ala Phe Val Leu Val Gly Ser
        195
                            200
                                                 205
Phe Val Leu Ile Met Ile Ser Tyr Ala Phe Ile Val Phe Leu Val Val
                        215
                                             220
Lys Met Pro Ser Val Gln Gly Arg His Lys Ala Phe Ser Thr Cys Ser
                    230
                                         235
Ser His Leu Thr Val Val Ser Met His Tyr Gly Phe Ala Cys Phe Val
                245
                                    250
Tyr Leu Ile Pro Lys Asn Ser Asp Ser Phe Arg Glu Asp Met Leu Met
            260
                                265
Ala Val Thr Tyr Thr Val Leu Thr Pro Leu Leu Asn Pro Ile Val Tyr
        275
                            280
Ser Leu Arg Asn Lys Glu Met Gln Thr Ala Leu Arg Lys Val Leu Ser
                        295
Ser Ile Asn Lys Met Leu Pro
<210> 2553
<211> 323
<212> PRT
<213> Mus musculus
<400> 2553
Met Asp Asn Thr Asn Tyr Ser Val Val Ser Glu Phe Val Leu Leu Gly
1
                 5
                                    10
Leu Ser Ser Ser Arg Glu Leu Gln Ile Phe Tyr Phe Val Phe Phe Ser
            20
                                25
Met Leu Tyr Ile Val Ile Ile Leu Gly Asn Leu Leu Ile Ile Ile Ala
                            40
                                                 45
Val Thr Ser Asp Ser Ser Leu His Ser Pro Met Tyr Phe Leu Leu Gly
                        55
                                             60
Asn Leu Ser Phe Phe Asp Ile Cys Gln Ala Ser Phe Ala Thr Pro Lys
```

Met Ile Val Asp Phe Leu Ser Glu His Lys Thr Ile Ser Phe Ser Gly Cys Ile Ala Gln Ile Phe Phe Ile His Leu Phe Thr Gly Gly Glu Met Val Ile Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Met Thr Ile Met Asn Gln Thr Thr Cys Thr Ala Leu Val Val Ile Ser Trp Ala Val Gly Leu Val His Thr Leu Ser Gln Leu Ser Phe Thr Val Lys Leu Ser Phe Cys Gly Pro Asn Glu Val Asp Ser Phe Phe Cys Asp Leu Pro Arg Val Val Lys Leu Ala Cys Ile Asp Ser Tyr Ile Thr Glu Ile Leu Ile Val Val Asn Ser Gly Ile Leu Ser Leu

```
Ser Thr Phe Ser Leu Leu Val Ser Ser Tyr Val Ile Ile Leu Val Thr
                        215
Val Trp Phe Lys Ser Ser Ala Ala Met Ala Lys Ala Phe Ser Thr Leu
                    230
                                        235
Ala Ala His Ile Met Val Val Leu Phe Phe Gly Pro Cys Ile Phe
                                    250
Ile Tyr Val Trp Pro Phe Thr Thr Tyr Pro Val Asp Lys Ile Leu Ala
            260
                                265
Ile Phe Tyr Thr Val Phe Thr Pro Ile Leu Asn Pro Ile Ile Tyr Thr
Leu Arg Asn Arg Asp Met Lys Ala Val Met Gly Lys Ile Ala Ala His
                        295
                                            300
Tyr Leu Arg Pro Pro Lys Val Ala Glu Met Ser Phe Val Ala Arg Ile
305
                    310
                                        315
Ser Leu Tyr
```

<210> 2554 <211> 321 <212> PRT

<213> Mus musculus

<400> 2554 Met Ala Thr Ala Val His Arg Asn Gly Ser Leu Thr Pro Val Ser Leu Gln Ala Phe Val Leu Val Gly Phe Gly Gly Gly Ala Glu Thr Gln Ala 25 Leu Leu Phe Ala Val Phe Leu Val Leu Tyr Met Val Thr Val Leu Gly 40 Asn Leu Thr Met Ile Val Val Ile Thr Leu Asp Ala Arq Leu His Ser Pro Met Tyr Phe Phe Leu Lys Asn Leu Ser Phe Val Asp Phe Cys Tyr 75 Ser Ser Val Ile Ala Pro Lys Ala Met Ala Asn Phe Tyr Ser Ser Lys Val Ile Gly Val Ala Gly Cys Ala Ala Gln Leu Phe Phe Phe Ser Phe 105 110 Leu Gly Thr Ser Glu Ala Leu Leu Leu Ala Val Met Ala Tyr Asp Arg 120 Phe Met Ala Ile Cys Ser Pro Leu His Tyr Pro Val Thr Met Ser Ser 135 140 Thr Val Cys Ala Cys Leu Val Leu Ala Ala Tyr Phe Gly Gly Cys Leu 150 155 Asn Ser Ile Val Glu Thr Ser Leu Thr Phe Gln Leu Pro Phe Cys Gly 165 170 175 Ser Asn His Ile Asp His Phe Phe Cys Asp Val Pro Pro Leu Leu Gln 185 190 Ile Ala Cys Ala Asn Thr Ser Val Asn Glu Leu Val Met Phe Ala Ile 195 200 Cys Gly Phe Ile Leu Met Gly Ala Thr Leu Val Ile Leu Ile Ser Tyr 210 215 220 Gly Tyr Ile Thr Val Thr Ile Leu Ser Met His Ser Gly Ser Arg Arg 230 His Lys Val Phe Ser Thr Cys Gly Ser His Leu Thr Ala Val Ser Leu 245 250 Phe Tyr Gly Thr Gly Ile Ala Ile Tyr Gly Gln Pro Gly Gly Leu Ala 265 Ser Lys Glu Gln Gly Lys Val Val Ser Ile Phe Tyr Thr Leu Val Ile

280 285 Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys 295 300 Asp Ala Leu Glu Arg Leu Arg Gln Arg Gln Arg Gln Lys His Ala Ala 305 Ile <210> 2555 <211> 319 <212> PRT <213> Mus musculus <400> 2555 Met Ala Thr Ala Val His Arg Asn Gly Ser Leu Thr Pro Val Ser Leu Arg Val Phe Val Leu Val Gly Phe Gly Gly Gly Ala Leu Thr Gln Ala 25 Leu Leu Phe Ala Val Phe Leu Val Leu Tyr Val Val Thr Val Leu Gly Asn Leu Thr Met Ile Val Val Ile Thr Leu Asp Ala Arg Leu His Ser 55 Pro Met Tyr Phe Phe Leu Lys Asn Leu Ser Phe Val Asp Leu Cys Tyr 70 75 Ser Ser Ala Ile Ala Pro Asn Ala Leu Ala Asn Phe Leu Ser Thr Ser Lys Val Ile Ser Phe Glu Ala Cys Ala Thr Gln Phe Phe Phe Ser 100 105 Leu Leu Ala Thr Thr Glu Thr Phe Leu Leu Ala Val Met Ala Tyr Asp 120 125 Arg Phe Met Ala Ile Cys Ser Pro Leu Arg Tyr Pro Val Thr Met Cys 135 140 Pro Thr Thr Cys Thr Arg Leu Val Leu Gly Thr Phe Cys Val Gly Cys 150 155 Leu Asn Ser Ile Val Gln Thr Ser Leu Thr Phe Gln Leu Pro Phe Cys 165 170 Ser Ser Asn Arg Ile Asp His Phe Tyr Cys Asp Val Pro Pro Leu Leu 180 185 190 Gln Leu Ala Cys Ala Ser Thr Ala Leu Asn Glu Leu Phe Leu Phe Gly 200 Leu Cys Gly Phe Ile Ile Val Ser Thr Thr Leu Ala Val Leu Val Ser 215 220 Tyr Gly Tyr Ile Thr Val Thr Ile Leu Arg Met His Ser Gly Ser Gly 230 235 Arg His Lys Val Phe Ser Thr Cys Gly Ser His Leu Thr Ala Val Ser 250 Leu Phe Tyr Gly Thr Leu Phe Val Met Tyr Ala Gln Pro Gly Ala Leu 265 270

Thr Ser Met Glu Gln Gly Lys Val Val Ser Ile Phe Tyr Thr Leu Val 275 280 285 Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val

Lys Asp Ala Leu Gln Arg Leu Gly Gln Arg His Ser Leu Val Lys

300

295

```
Leu Ser Gln Leu Ser Ile Met Asp Leu Thr Met Thr Cys Thr Val Val
                    70
Pro Lys Met Ala Thr Asn Phe Leu Ser Gly Gly Lys Leu Ile Ser Leu
                                    90
                85
Gly Gly Cys Ala Ser Gln Ile Phe Phe Val Val Thr Val Gly Gly Ala
                                105
                                                    110
           100
Glu Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Met Ala Val
                            120
                                                125
        115
Cys Tyr Pro Leu Arg Tyr Pro Val Leu Met Asn Trp Lys Ala Cys Ser
                        135
                                            140
Phe Leu Ala Thr Ala Ser Trp Met Gly Gly Met Ala Asp Ser Val Ile
                    150
                                        155
Asp Val Gly Val Val Phe Ser Phe Pro Tyr Cys Gly Ser Leu Glu Val
                                    170
                165
Asp His Phe Phe Cys Glu Val Pro Ala Leu Leu Arg Leu Ser Cys Ala
                                185
                                                    190
           180
Asp Thr Ser Leu Phe Glu Asp Leu Ile Tyr Ala Cys Cys Val Val Met
       195
                            200
                                                205
Leu Leu Pro Leu Gly Val Ile Val Ala Ser Tyr Ala Arg Val Leu
                        215
                                            220
Thr Thr Val Met Arg Met Pro Ser Thr Glu Gly Lys Gln Lys Ala Leu
                    230
                                        235
Thr Thr Cys Ser Ser His Leu Ala Val Val Gly Leu Tyr Tyr Gly Gly
                245
                                    250
Ala Ile Phe Ser Tyr Met Gln Arg Ala Ser Ala Arg Thr Pro Leu Gly
                                265
                                                    270
Asp Arg Ala Thr Ser Ile Phe Tyr Thr Ile Val Thr Pro Met Phe Asn
                            280
                                                285
Pro Leu Ile Tyr Ser Leu Arg Asn Arg Glu Val Thr Ser Ala Leu Lys
                        295
Lys Met Leu Glu Arg Trp Gly Met
                    310
<210> 2558
<211> 309
<212> PRT
<213> Mus musculus
<400> 2558
Met Asp Ser Phe Asn Ala Thr Leu Glu Glu Arg Phe Phe Leu Val Gly
                                    10
Phe Ser Asp Trp Pro Gln Leu Glu Leu Ile Leu Phe Val Phe Ile Ser
                                25
Ile Val Tyr Ser Leu Thr Ile Phe Gly Asn Thr Thr Ile Ile Ala Leu
        35
                            40
Ser Arg Ile Asp Leu Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Thr Val Pro Gln
                    70
Leu Leu Ile Asn Leu Tyr Gly Gln Asp Arg Thr Ile Ser Tyr Gly Gly
                                    90
Cys Val Ala Gln Leu Phe Ile Tyr Leu Ala Leu Gly Ser Thr Glu Cys
                                105
Val Leu Leu Val Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg
                            120
```

Pro Leu His Tyr Thr Thr Ile Met His Pro Leu Leu Cys Gln Ala Leu

```
Ala Leu Ala Ser Trp Val Gly Gly Phe Leu Asn Ser Leu Ile Gln Thr
Gly Leu Met Met Thr Met Pro Leu Cys Gly His Arg Leu Asn His Phe
                                    170
Phe Cys Glu Met Pro Val Phe Leu Lys Leu Ala Cys Gln Asp Thr Gly
                                185
                                                    190
Gly Thr Glu Ala Lys Met Phe Val Ala Arg Ala Ile Ile Leu Val Phe
        195
                            200
Pro Ala Thr Leu Ile Leu Gly Ser Tyr Gly His Ile Ala Lys Ala Val
                        215
Leu Lys Val Lys Ser Thr Ala Gly Arg Arg Lys Ala Phe Gly Thr Cys
                    230
                                        235
Gly Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Ser Ala Ile Tyr
                                    250
Thr Tyr Leu Gln Pro Lys Ser Ser Tyr Ser Glu Ser Glu Gly Lys Phe
                                                     270
                                265
Val Ala Leu Phe Tyr Thr Ile Val Thr Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Val Leu
                        295
Gly Arg Gly Thr Asp
305
```

<210> 2559 <211> 320 <212> PRT

<213> Mus musculus

<400> 2559

Met Thr Pro Phe Glu Met Thr Asn His Thr Arg Val Thr Glu Phe Ile Phe Leu Gly Phe Ser Asn His Pro Asn Leu Gln Gly Val Phe Phe Leu 20 Ala Phe Leu Ala Ile Tyr Leu Thr Thr Leu Leu Gly Asn Thr Leu Met 40 Ile Val Ala Thr Arg Val Ser Pro Ala Leu His Thr Pro Met Tyr Tyr 55 Phe Leu Ser Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Ser Thr Ser 70 75 Ile Pro Val Met Leu Val Asn Phe Phe Arg Glu Lys Lys Thr Ile Ser 90 Phe Glu Gly Cys Leu Ser Gln Ile Phe Phe Phe Val Ser Cys Ala Gly 100 105 Thr Glu Cys Val Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala 120 Val Cys His Pro Leu Arg Tyr Pro Val Leu Met Ser Thr Arg Val Cys 130 135 Ile Ser Leu Val Thr Gly Ser Trp Leu Cys Gly Leu Val Asn Ser Val 150 155 Thr His Thr Val Leu Thr Ser Thr Leu Thr Leu Cys Gly Pro Asn Gln 165 170 Ile Ser His Phe Leu Cys Asp Val Pro Leu Leu Lys Leu Ser Cys 180 185 190 Ser Asp Thr Ser Val Asn Glu Ser Val Leu His Val Ser Ser Ala Thr 200 205 Val Gly Leu Ser Pro Cys Leu Phe Thr Ala Gly Ser Tyr Ile Leu Ile 215 220 Ile Ser Ala Ile Leu Arg Ile Pro Ser Thr Gln Gly Lys Arg Lys Ala

```
225
                    230
                                        235
Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Val Phe Phe Gly
                                    250
Thr Ala Asn Phe Asn Tyr Val Arg Pro Lys Glu Gly Tyr Ser Leu Asp
                                                    270
                                265
Met Gly Ile Leu Val Ser Val Leu Tyr Cys Val Val Thr Pro Leu Phe
       275
                            280
Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Leu
                        295
Arg Lys Leu Thr Gly Val Pro Ser Leu Thr Ile Ala Val Ala Arg Glu
<210> 2560
<211> 322
<212> PRT
<213> Mus musculus
<400> 2560
Met Trp Ile Gln Leu Glu Phe Met Glu Asn His Lys Asn Ile Thr Glu
Phe Ile Phe Met Gly Leu Trp Glu Asn Arg Gln Ile Glu Leu Leu Phe
Phe Phe Leu Phe Leu Cys Tyr Leu Ala Val Leu Met Gly Asn Ser
                            40
Val Ile Phe Leu Thr Ile Thr Cys Ser His Leu Ile Glu Gln Pro Met
Tyr Tyr Phe Leu Cys His Leu Ser Leu Met Asp Leu Cys Tyr Pro Ser
                                        75
Thr Val Ile Pro Arg Leu Ile Arg Asp Leu Ala Ala Thr Arg Lys Asn
                                    90
Ile Ser Tyr Asn Glu Cys Met Thr Gln Leu Phe Thr Ala His Leu Leu
           100
                                105
                                                    110
Ala Gly Val Glu Ile Phe Ile Leu Val Ser Met Ala Leu Asp Arg Tyr
       115
                            120
                                                125
Val Ala Ile Val Lys Pro Leu His Tyr Met Val Ile Met Ser Arg Lys
                        135
Arg Cys Asp Met Leu Ile Val Thr Ala Trp Ile Leu Gly Phe Trp His
                    150
                                        155
Ser Ile Ala Leu Leu Met Val Leu Ser Leu Pro Phe Cys Gly Pro
                                    170
Asn His Ile Asn His Tyr Phe Cys Asp Ile Lys Pro Leu Leu Lys Leu
                                185
                                                    190
Val Cys Lys Asp Val His Val Val Ser Ile Leu Ala Ile Val Asn Ser
       195
                            200
Gly Met Val Leu Phe Ala Ile Phe Ile Val Leu Leu Ala Ser Tyr Ile
                        215
Leu Ile Leu Tyr Ser Leu Arg Thr Arg Ser Ser Ala Gly Lys Trp Lys
                                        235
                    230
Val Leu Ser Thr Cys Ser Ser His Ile Met Val Val Val Leu Phe Phe
                245
                                    250
Gly Pro Cys Ile Tyr Thr Tyr Val Leu Pro Ala Gly Ser Glu Asn Lys
            260
                                265
Asp Lys Glu Ile Ser Val Phe Tyr Thr Val Ile Ala Pro Ile Leu Asn
        275
                            280
                                                285
Pro Val Ile Tyr Thr Leu Arg Asn Ser Glu Met Lys Ser Ala Met His
                        295
                                            300
Lys Val Trp Ser Arg Leu Ser Asn Leu Gly Leu Lys Tyr Val Lys Pro
```

305

310

315

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<210> 2561
<211> 312
<212> PRT
<213> Mus musculus
<400> 2561
Met Asp Lys Ala Asn His Ser Val Val Ser Glu Phe Val Phe Leu Gly
                                    10
Leu Ser Asn Arg Trp Gly Ile Gln Leu Leu Phe Leu Phe Ser Ser
                                25
Met Phe Tyr Ile Ala Ser Val Met Gly Asn Leu Leu Ile Val Phe Ser
        35
                            40
Val Thr Ala Asp Ser Asn Leu His Ser Pro Met Tyr Phe Leu Leu Ala
                        55
Asn Leu Ser Phe Leu Asp Leu Gly Val Cys Ser Ile Ala Ala Pro Lys
                    70
                                        75
Met Ile Phe Asp Leu Phe Arg Lys His Lys Ala Ile Ser Phe Gly Gly
                                    90
                85
Cys Ile Thr Gln Ile Phe Phe Ile His Ala Ile Gly Gly Thr Glu Met
            100
                                105
                                                    110
Val Leu Leu Ile Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys
                            120
        115
Pro Leu His Tyr Leu Thr Ile Met Arg Pro Gln Ile Cys Ile Leu Ile
    130
                        135
                                            140
Leu Ala Val Ser Trp Val Leu Gly Leu Ile His Ser Val Ala Gln Leu
                   150
                                        155
Ala Phe Val Val Asp Leu Pro Phe Cys Gly Pro Asn Ile Leu Asp Ser
               165
                                    170
                                                        175
Phe Tyr Cys Asp Leu Pro Gln Leu Ile Lys Leu Ala Cys Thr Glu Thr
            180
                                185
                                                    190
Ser Lys Leu Val Phe Met Val Thr Ala Asn Ser Gly Leu Ile Ser Val
        195
                            200
Gly Ser Phe Phe Ile Leu Ile Ile Ser Tyr Ile Phe Ile Leu Val Thr
                        215
                                            220
Val Arg Lys His Ser Ser Gly Ser Ile Ala Lys Ala Leu Ser Thr Leu
                    230
                                        235
Ser Ala His Val Thr Val Val Leu Phe Phe Gly Pro Leu Ile Phe
                245
                                    250
Phe Tyr Thr Trp Pro Phe Pro Ser Ser His Leu Asp Lys Phe Leu Ala
            260
                                265
                                                    270
Ile Phe Asp Ala Val Leu Thr Pro Phe Leu Asn Pro Val Ile Tyr Thr
                            280
                                                285
Phe Arg Asn Lys Glu Met Lys Ala Ala Met Arg Lys Leu Cys Ser Gln
                        295
Leu Val Asn Tyr Arg Lys Val Ser
<210> 2562
<211> 298
<212> PRT
<213> Mus musculus
<400> 2562
Ser Lys Leu Phe Leu Phe Val Phe Ser Ser Met Phe Tyr Val Ala Ser
```

```
Met Thr Gly Asn Ser Leu Ile Val Phe Thr Val Ala Ser Asp Pro His
                                25
                                                     30
Leu His Ser Pro Met Tyr Phe Leu Leu Ala Asn Leu Ser Phe Ile Asp
                            40
Leu Gly Val Ser Ser Val Ile Ala Pro Lys Met Ile Tyr Asp Leu Phe
                        55
Arg Lys His Lys Val Ile Ser Phe Arg Gly Cys Val Thr Gln Ile Phe
                    70
                                        75
Phe Ile His Phe Ile Gly Gly Val Glu Met Val Leu Leu Ile Ala Met
                                    90
Ala Phe Asp Arq Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Leu Ile
            100
                                105
                                                     110
Ile Met Arq Pro Arq Met Cys Ile Leu Phe Ile Val Ala Ser Trp Val
                            120
                                                125
Val Gly Phe Met His Ser Leu Val Gln Leu Ala Phe Val Val Asn Leu
                        135
                                             140
Pro Phe Cys Gly Pro Asn Val Leu Asp Ser Phe Tyr Cys Asp Phe Pro
                                        155
                    150
Arg Phe Ile Lys Leu Ala Cys Ile Asp Thr Tyr Arg Leu Lys Leu Leu
                                    170
Val Leu Val Asn Ser Gly Phe Met Ser Val Gly Ser Phe Phe Ile Leu
                                185
                                                     190
Ile Ile Ser Tyr Val Val Ile Ile Phe Ile Val His Lys His Ser Ser
                            200
                                                 205
Ser Gly Ser Ser Lys Ala Leu Ser Thr Leu Ser Ala His Val Met Val
                        215
Val Val Leu Phe Phe Gly Pro Val Met Phe Ile Tyr Thr Trp Pro Ser
                    230
Ser Leu Thr His Leu Asp Lys Phe Leu Pro Ile Phe Asp Ala Ile Val
                                    250
Thr Pro Phe Leu Asn Pro Val Ile Tyr Thr Phe Arg Asn Gln Glu Met
                                265
Lys Met Ala Met Met Arg Val Leu Arg Gln Ile Met Gly Tyr Arg Gln
                            280
                                                 285
Ile Ile Lys His Leu His Pro Asp Gln Ser
    290
<210> 2563
<211> 290
<212> PRT
<213> Mus musculus
<400> 2563
Asn Ile Gln Leu Leu Phe Leu Leu Ser Ser Val Leu Tyr Val Ala
                                    10
Ser Met Met Gly Asn Cys Leu Ile Ile Phe Thr Val Ala Ser Asp Pro
Gln Leu His Ser Pro Met Tyr Phe Leu Leu Ser Asn Leu Ser Phe Ile
                            40
Asp Ile Gly Ile Ser Ser Ala Thr Ser Pro Lys Met Ile Tyr Asp Leu
                        55
Phe Lys Lys Asn Lys Val Ile Ser Phe Arg Gly Cys Ile Ile Gln Ile
                    70
                                        75
Phe Phe Ile His Ala Ile Gly Gly Val Glu Met Val Leu Leu Ile Ala
                8.5
                                    90
Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Leu
```

110

100

```
Thr Met Met Ser Pro Gln Met Cys Ile Phe Phe Leu Ile Thr Ala Trp
                            120
Val Val Gly Leu Met His Ser Val Ile Gln Leu Val Phe Ile Val Asn
                        135
                                            140
Leu Pro Leu Cys Gly Gln Leu Leu Asp Ser Phe Tyr Cys Asp Leu Pro
                    150
                                        155
Gln Phe Ile Lys Leu Ala Cys Met Asp Thr Tyr Arg Leu Glu Leu Met
                                    170
Val Ser Ile Ser Ser Gly Phe Met Ser Val Ala Phe Phe Phe Ile Leu
                                185
                                                    190
Ile Ile Ser Tyr Val Val Ile Ile Phe Thr Val Leu Lys His Ser Ser
                            200
                                                205
Ser Gly Ser Tyr Lys Ala Leu Ser Thr Leu Ser Ala His Val Thr Val
                        215
Val Val Leu Phe Phe Gly Pro Ala Ile Phe Phe Tyr Thr Trp Pro Ser
                    230
                                        235
Ser Ser Thr His Leu Asp Lys Phe Leu Ala Leu Phe Asp Ala Val Val
                                    250
Thr Pro Phe Leu Asn Pro Val Ile Tyr Thr Leu Arg Asn Gln Glu Met
                                265
Lys Met Ala Met Arg Arg Val Phe Arg His Leu Met Gly Tyr Arg Gln
                            280
                                                285
Ile Ser
   290
```

<210> 2564 <211> 310 <212> PRT

<213> Mus musculus

<400> 2564

Met Thr Glu Asn Gln Thr Trp Ile Pro Glu Phe Thr Leu Gln Gly Phe Leu Leu Ser Pro Arq Met Gln Met Leu Leu Cys Gly Leu Phe Ser Leu Leu Tyr Thr Phe Thr Leu Leu Gly Asn Gly Val Ile Leu Gly Leu Ile 40 Trp Leu Asp Cys Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His 55 Leu Ala Ile Val Asp Ile Ser Tyr Ala Thr Asn Asn Val Pro Lys Met 70 Leu Ala Asn Leu Leu Ala Lys Lys Ser Ile Ser Phe Ala Pro Cys 90 Ile Met Gln Thr Phe Leu Tyr Met Ala Phe Ala His Thr Glu Cys Leu 105 Ile Leu Val Met Met Ser Tyr Asp Arg Tyr Ala Ala Ile Cys Gln Pro 120 125 Leu Gln Tyr Ser Val Ile Met Ser Trp Lys Val Cys Thr Ile Met Ala 135 140 Val Ala Ser Trp Ala Cys Gly Ser Leu Leu Ala Leu Val His Val Val 150 155 Leu Ile Leu Arg Leu Pro Phe Cys Gly Leu His Glu Ile Asn His Phe 165 170 175 Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Val Cys Ala Asp Thr Thr 180 185 190 Leu Asn Gln Ile Val Ile Phe Ala Gly Ser Val Phe Ile Leu Val Gly 200 Pro Leu Cys Phe Val Leu Val Ser Tyr Thr Arg Ile Leu Ile Ala Ile

```
220
    210
Leu Lys Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys
                    230
                                        235
                                                             240
Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val
                245
                                    250
Met Tyr Met Ala Pro Lys Ser Gln His Pro Glu Thr Gln Gln Lys Val
                                265
Leu Ser Leu Phe Tyr Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Ala Glu Val Lys Gly Ala Val Lys Arg Val Leu
                        295
Trp Lys Gln Arg Ser Arg
<210> 2565
<211> 308
<212> PRT
<213> Mus musculus
<400> 2565
Met Ala Thr Gly Asn His Ser Ala Ala Val Val Phe Val Leu Val Gly
Leu Thr Gln Gln Pro Glu Leu Leu Pro Leu Phe Ile Leu Phe Leu
                                25
Gly Ile Tyr Val Val Thr Ala Val Gly Asn Leu Gly Met Ile Leu Leu
        35
                            40
Ile Thr Val Ser Pro Leu Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
                        55
Ser Leu Ser Phe Val Asp Leu Ser Tyr Ser Thr Val Ile Thr Pro Lys
                    70
                                        75
Met Leu Val Asn Phe Leu Gly Lys Lys Asn Phe Ile Thr Tyr Ser Glu
                85
                                    90
Cys Met Ala Gln Phe Phe Phe Ala Val Phe Val Val Thr Glu Gly
            100
                                105
                                                    110
Tyr Leu Leu Thr Val Met Ala Tyr Asp His Tyr Val Ala Ile Cys Arg
                            120
                                                125
Pro Leu Leu Tyr Asn Val Met Met Ser Ser Lys His Cys Leu Leu Leu
                        135
                                            140
Val Leu Val Ala Phe Thr Leu Gly Leu Phe Ser Ala Val Val His Thr
                    150
                                        155
Ser Ala Met Met Ser Leu Asn Phe Cys Lys Thr Tyr Ile Ile Ser His
                                    170
                165
Tyr Phe Cys Asp Ala Leu Pro Leu Leu Lys Leu Ser Cys Ser Asn Thr
            180
                                185
                                                    190
His Leu Asn Glu Leu Leu Ile Phe Ile Ile Gly Gly Ile Asn Thr Leu
        195
                            200
Val Pro Thr Leu Ala Val Ala Ile Ser Tyr Val Phe Ile Phe Cys Ser
                        215
Ile Arg His Ile Lys Ser Ser Lys Ser Arg Ser Lys Ala Phe Gly Thr
                    230
                                        235
Cys Ser Ser His Leu Met Ala Val Gly Ile Phe Phe Gly Ser Ile Thr
                245
                                    250
Phe Met Tyr Leu Lys Pro Ser Ser Ser Asn Ser Leu Glu Glu Lys
Val Ser Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Lys Ala Leu Gly Arg Phe
    290
                        295
                                            300
```

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<210> 2566
<211> 318
<212> PRT
<213> Mus musculus
<400> 2566
Met Arg Arg Asn Arg Asn Thr Ser Leu Asp Asp Val Val Thr Asp Phe
Leu Leu Gly Leu Ala His Pro Pro Asn Leu Arg Ala Phe Leu Phe
                                25
Leu Val Phe Phe Leu Ile Tyr Ile Leu Thr Gln Leu Gly Asn Leu Leu
Ile Leu Leu Thr Val Trp Ala Asp Pro Lys Leu His Ala Arg Pro Met
Tyr Ile Leu Leu Gly Val Leu Ser Phe Leu Asp Met Trp Leu Ser Ser
                                         75
Val Ile Val Pro Arg Ile Ile Leu Asn Phe Thr Pro Ala Ser Lys Val
                                    90
Ile Ala Phe Gly Gly Cys Ala Ala Gln Leu Tyr Phe Phe His Phe Leu
            100
                                105
                                                     110
Gly Ser Thr Gln Cys Phe Leu Tyr Thr Leu Met Ala Tyr Asp Arg Tyr
                            120
                                                 125
Leu Ala Ile Cys Gln Pro Leu Arg Tyr Pro Val Leu Met Asn Gly Lys
                        135
Leu Cys Thr Ile Leu Val Ser Gly Ala Trp Val Ala Gly Ser Ile His
                    150
                                         155
Gly Ser Ile Gln Ala Thr Leu Thr Phe Arg Leu Pro Tyr Cys Gly Pro
                165
                                    170
                                                         175
Lys Glu Val Asp Tyr Phe Phe Cys Asp Ile Pro Ala Val Leu Arg Leu
            180
                                185
                                                     190
Ala Cys Ala Asp Thr Thr Val Asn Glu Leu Val Thr Phe Val Asp Ile
                            200
Gly Val Val Ala Ala Ser Cys Phe Met Leu Ile Leu Leu Ser Tyr Ala
                        215
                                             220
Asn Ile Val His Ala Ile Leu Lys Ile Arg Thr Ala Asp Gly Arg Lys
                                         235
Arg Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Thr Val Tyr
                                    250
Tyr Val Pro Cys Ile Phe Ile Tyr Leu Arg Ala Gly Ser Lys Ser Pro
                                                     270
Phe Asp Gly Ala Val Ala Val Phe Tyr Thr Val Val Thr Pro Leu Leu
        275
                            280
                                                 285
Asn Pro Leu Ile Tyr Thr Leu Arg Asn Gln Glu Val Lys Ser Ala Leu
                        295
Lys Arg Leu Arg Ala Gly Arg Arg Asp Val Asp Gly Glu Lys
305
                    310
<210> 2567
<211> 311
<212> PRT
<213> Mus musculus
<400> 2567
Met Glu Lys Asn Asn Glu Ser Ser Gly Glu Phe Ile Leu Leu Gly Phe
```

Ser Val Arg Arg

```
Ser Asp Gln Pro Arg Leu Glu Met Val Leu Phe Val Val Cys Thr Val
                                25
                                                    30
Phe Tyr Phe Leu Ala Val Thr Gly Asn Ser Ala Ile Ile Phe Leu Ser
                            40
Leu Met Asp Leu Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn
Leu Ser Leu Leu Asp Leu Cys Tyr Ser Thr Ser Ser Ile Pro Gln Phe
                                        75
Gln Ile Asn Leu Trp Gly Pro Arg Lys Thr Ile Ser Phe Val Gly Cys
                                    90
Ala Val Gln Leu Phe Ala Phe Leu Ser Val Gly Gly Ile Glu Cys Ile
            100
                                105
Leu Leu Ser Val Met Ala Tyr Asp Arg Phe Val Ala Val Cys Lys Pro
                            120
Leu His Tyr Leu Thr Ile Met His Pro Gln Leu Cys Leu Lys Leu Ala
                        135
Ala Phe Ala Trp Leu Gly Gly Thr Ala Ser Ser Thr Leu Met Ser Pro
                    150
                                         155
Leu Thr Met Ser Leu Gly Arg Cys Gly His Arg Arg Ile Asn His Phe
                165
                                    170
Val Cys Glu Met Pro Ala Ile Ile His Ile Ser Cys Val Asp Thr Ser
                                                     190
            180
                                185
Trp Ile Glu Gly Leu Ile Phe Ile Leu Ala Ile Pro Ile Val Leu Val
        195
                            200
Pro Leu Ile Met Ile Leu Val Ser Tyr Gly Tyr Ile Ala Ala Val
                        215
Leu Arg Ile Lys Ser Thr Ala Ser Arg Arg Lys Ala Phe Asn Thr Cys
                    230
                                        235
Ser Ser His Met Ala Val Val Ser Leu Phe Tyr Ser Ser Ile Ile Tyr
                245
                                    250
Met Tyr Met Gln Pro Gly Asn Leu Ala Ser Gln Asp Gln Gly Lys Phe
                                265
                                                     270
Leu Thr Leu Phe Tyr Cys Leu Val Thr Pro Thr Leu Asn Pro Phe Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Met Lys Ala Ala Met Leu Lys Val Leu
                        295
Gly Lys Asp Arg Asn Leu Leu
<210> 2568
<211> 309
<212> PRT
<213> Mus musculus
<400> 2568
Met Ala Leu Ala Asn Val Ser Ser Val Lys Glu Phe Ile Leu Leu Gly
Leu Thr Gln Gln Pro Glu Leu Gln Leu Pro Leu Phe Phe Leu Phe Leu
Gly Ile Tyr Val Val Ser Val Met Gly Asn Leu Gly Leu Ile Val Leu
                            40
Ile Val Leu Asn Pro His Leu His Thr Pro Met Tyr Tyr Phe Leu Phe
                        55
Asn Leu Ser Phe Thr Asp Leu Cys Tyr Ser Ser Ala Ile Thr Pro Arg
                    70
                                        75
Met Leu Val Gly Phe Val Lys Gln Asn Ile Ile Ser His Ala Glu Cys
```

```
Leu Thr Gln Leu Phe Phe Phe Ala Phe Phe Val Ile Asp Glu Cys Tyr
Ile Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys Pro
       115
                            120
Leu Leu Tyr Gln Val Thr Met Ser His Gln Val Cys Leu Leu Met Thr
                        135
                                            140
Met Gly Val Tyr Val Met Gly Phe Ala Gly Ala Leu Ser His Ile Val
                    150
                                        155
Cys Met Leu Arg Leu Thr Phe Cys Asp Gly Asn Ile Ile Asn Asn Tyr
               165
                                    170
Val Cys Asp Val His Pro Leu Leu Lys Leu Ser Cys Ser Ser Thr Ser
           180
                                185
                                                    190
Ile Asn Glu Leu Val Leu Phe Ile Val Val Gly Val Asn Ile Thr Val
       195
                            200
Pro Ser Leu Thr Leu Phe Val Ser Tyr Thr Leu Ile Leu Ser Asn Ile
                        215
Leu Ser Ile His Ser Gly Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                    230
                                        235
Gly Ser His Val Ile Ala Val Ser Phe Phe Phe Gly Ala Ala Ala Phe
                245
                                    250
Met Tyr Leu Lys Pro Ser Ser Ala Ser Val Asp Glu Asp Lys Val Ser
            260
                                265
                                                    270
Thr Ile Phe Tyr Thr Ile Leu Gly Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Ser Ile Arg Asn Lys Asp Val His Ile Ala Leu Lys Lys Thr Leu Lys
Lys Lys Ile Leu Thr
305
```

<210> 2569 <211> 322

<212> PRT

<213> Mus musculus

<400> 2569

Lys Ser Ser Ala Ala Pro Ser Asn Ser Ser Thr Ile Thr Gly Phe Ile 1 10 Leu Leu Gly Phe Pro Cys Pro Arg Glu Gly Gln Ile Leu Leu Phe Val 25 Leu Phe Ser Ile Val Tyr Leu Leu Thr Leu Met Gly Asn Ala Ser Ile 45 40 Ile Cys Ala Val Tyr Cys Asp Gln Lys Leu His Ile Pro Met Tyr Leu 55 Leu Leu Ala Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Thr Ser Thr Val Pro Asn Met Leu Ala Asn Phe Leu Ser Asp Thr Lys Val Ile Ser 90 Phe Ser Gly Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser Leu Gly Ser 100 105 110 Thr Glu Cys Phe Phe Leu Ala Val Met Ala Phe Asp Arg Tyr Leu Ala 115 120 125 Ile Cys Arg Pro Leu His Tyr Pro Ala Leu Met Thr Gly Arg Leu Cys 135 Asn Ile Leu Val Ile Ser Cys Trp Ile Leu Gly Phe Leu Trp Phe Pro 150 155 Val Pro Ile Ile Ile Ser Gln Val Ser Phe Cys Gly Ser Arg Ile 170 Ile Asp His Phe Leu Cys Asp Pro Gly Pro Leu Leu Ala Leu Thr Cys

```
185
Lys Lys Ser Pro Leu Ile Glu Leu Val Phe Ser Ile Leu Ser Pro Leu
                            200
        195
Pro Leu Ile Ile Pro Phe Val Phe Ile Met Gly Ser Tyr Thr Leu Val
                                             220
                        215
Leu Ala Ala Val Leu Lys Val Pro Ser Ala Ser Gly Lys Arg Lys Ala
                    230
                                         235
Phe Ser Thr Cys Gly Ser His Leu Ala Val Val Ala Leu Phe Tyr Gly
                245
                                    250
Ser Val Leu Val Met Tyr Gly Ser Pro Thr Ser Glu His Glu Ala Gly
            260
                                265
Met Gln Lys Ile Val Thr Leu Phe Tyr Ser Val Leu Thr Pro Leu Leu
        275
                            280
Asn Pro Val Ile Tyr Ser Leu Arg Asn Lys His Met Lys Ile Ala Leu
Lys Glu Ile Leu Arg Lys Ile Lys Asn Trp Ser Thr Lys Lys Ala Leu
                    310
305
Gly Asn
```

<210> 2570 <211> 322 <212> PRT

<213> Mus musculus

<400> 2570

Met Ala Pro Glu Asn Gln Thr Thr Val Leu Glu Phe His Leu Met Gly 10 Leu Ser Glu Asp Pro Asp Leu Gln Thr Ile Leu Phe Gly Leu Phe Leu 25 Ser Met Tyr Leu Val Thr Val Phe Gly Asn Leu Leu Ile Ile Leu Ala 40 Ile Ile Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Cys 55 Asn Leu Ser Leu Val Asp Ile Phe Phe Cys Ser Thr Thr Val Pro Lys 70 75 Met Leu Val Asn Ile Gln Thr Gln Ser Arg Ala Ile Ser Phe Thr Gly 85 90 Cys Leu Val Gln Met Tyr Ala Phe His Leu Phe Gly Thr Ile Asp Ser 100 105 Phe Leu Leu Ala Val Met Ala Ile Asp Arg Leu Val Ala Ile Ala Tyr 115 120 125 Pro Leu Arg Tyr Ser Val Leu Met Ser Pro His Val Cys Ala Leu Leu 135 140 Val Gly Gly Thr Trp Val Ile Thr Asn Leu Gln Ser Leu Val His Thr 150 155 Cys Leu Met Ala Gln Leu Thr Phe Cys Ala Arg Ser Glu Ile Pro His 170 Phe Phe Cys Asp Leu Met Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr 180 185 190 His Ile Asn Glu Leu Val Ile Phe Ala Phe Gly Ile Val Met Gly Leu 195 200 Ser Pro Leu Ser Cys Ile Leu Val Ser Tyr Ile Cys Ile Phe Arg Ala 220 Val Phe Arg Ile Pro Ser Ala Gln Gly Lys Trp Lys Ala Phe Ser Thr 235 Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Thr Ile Phe 250

Thr Gly Tyr Leu Leu Pro Ala Ser Pro Ser Ser Ser Gln Lys Asp Lys 265 Ala Ala Ala Leu Met Phe Gly Val Val Ile Pro Thr Leu Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Ala Ala Leu Gly Ser Leu 295 300 Ala Ala Lys Gln Ser His Ser Ser Pro Ser Ala Glu Gln Glu Leu Cys 310 315 Gly His

<210> 2571 <211> 321 <212> PRT <213> Mus musculus

<400> 2571

Met Gly Pro Gly Thr Leu Asn Asp Ser Gly Thr Thr Glu Phe Leu Leu Leu Gly Leu Trp Ala Pro Pro Ser Leu Arg Pro Leu Leu Trp Ala Ser 20 Leu Leu Leu Ala Tyr Leu Thr Thr Val Leu Gly Asn Gly Ala Leu Val Gly Leu Ile Ala Leu Asp Arg Arg Leu His Arg Pro Met Tyr Arg Leu 55 Leu Thr His Leu Ala Leu Leu Asp Thr Ala Tyr Val Ser Thr Thr Leu 75 Pro Gln Ala Leu Ala His Met Thr Met Arg Ser Ala Arg Leu Ser Leu 90 Val Arg Cys Gly Thr Gln Leu Tyr Val Gly Ile Ser Leu Gly Ser Cys 100 105 Glu Ala Ile Leu Leu Ala Ala Met Ala Leu Asp Arg Cys Leu Ala Val 120 Cys Arg Pro Leu His Tyr Ala Thr Leu Val Thr Ala Pro Arg Cys Ala 135 140 Ala Leu Ala Gly Ala Ser Trp Thr Leu Gly Phe Ala Leu Ser Val Pro 150 155 Asn Ala Val Ala Ala Leu Arg Leu Pro Phe Cys Pro Gly Arg Ala Ala 165 170 Val Asp His Phe Phe Cys Glu Leu Pro Ala Val Leu Arg Thr Ala Cys 180 185 190 Ala Asp Thr Thr Ala Asn Tyr Arg Leu Val Tyr Gly Leu Gly Val Pro 200 Ile Leu Leu Val Pro Leu Val Leu Ile Leu Ala Ser Tyr Thr Trp Ile 215 Leu Ala Ala Val Arg Lys Leu Pro Ser Ala Gly Ser Arg His Lys Ala 230 235 Leu Ser Thr Cys Ser Ser His Leu Ala Val Val Gly Leu Phe Tyr Gly 250 Thr Val Ser Ala Met Tyr Leu Arg Pro Lys Ala Ser Ser Asp Leu Pro 265 270 Ala Arg His His Lys Leu Val Ala Val Phe Tyr Leu Val Val Thr Pro 280 Val Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Arg Glu Val His Met 295 300 Ala Ala Arg Tyr Ala Leu Ala Arg Leu Arg Gly Thr Arg Ile Val Leu 305 310 315 His

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<211> 314
<212> PRT
<213> Mus musculus
<400> 2572
Met Glu Cys Val Asn Asp Thr Val Val Arg Glu Phe Val Phe Leu Gly
                                    10
Phe Ser Ser Leu Ala Glu Leu Gln Leu Leu Phe Ala Val Phe Leu
            20
                                25
Ser Leu Tyr Leu Phe Thr Leu Ser Thr Asn Ala Val Ile Val Ser Thr
        35
                            40
Ile Val Leu Asp Arg Ala Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                                             60
Val Leu Ser Cys Ser Glu Thr Cys Tyr Thr Phe Val Ile Val Pro Lys
                    70
                                         75
Met Leu Val Asp Leu Leu Ala Arg Lys Lys Ser Ile Ser Phe Leu Gly
                85
                                    90
Cys Ala Ile Gln Met Phe Thr Phe Leu Phe Leu Gly Cys Ser His Ser
                                105
                                                     110
Phe Leu Leu Ala Ala Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu Arg Tyr Thr Val Leu Met Gly His Arg Val Cys Val Gly Leu
                        135
                                             140
Val Ala Ala Ala Cys Val Cys Gly Phe Thr Val Ala Gln Val Ile Thr
                    150
                                         155
Ser Gln Val Phe Arg Leu Pro Phe Arg Ser Ser Asn Gln Leu His His
                                    170
                165
Phe Phe Cys Asp Ile Ser Pro Val Leu Gln Leu Ala Ser His His Pro
            180
                                185
                                                     190
His Ser Thr Gln Ile Thr Ile Phe Leu Leu Cys Ala Leu Val Leu Val
                            200
Ile Pro Leu Leu Ile Leu Val Ser Tyr Ile His Ile Ile Ser Ala
                        215
Ile Leu Gln Phe Pro Ser Thr Leu Gly Arg Tyr Lys Ala Phe Ser Thr
225
                    230
                                         235
Cys Ala Ser His Leu Ile Val Val Ile Val His Tyr Gly Cys Ala Ser
                245
                                    250
Phe Ile Tyr Leu Arg Pro Lys Ser Ser Tyr Ser Ser Ser Gln Asp Ala
                                265
Leu Ile Ser Val Ser Tyr Thr Ile Leu Thr Pro Leu Phe Asn Pro Val
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Phe Lys Ser Ala Leu His Arg Val
    290
                        295
                                             300
Ile Gly Arg Thr Val Thr Leu Arg Gln His
305
                    310
<210> 2573
<211> 231
<212> PRT
<213> Mus musculus
<400> 2573
Ser Val Thr Pro Lys Met Leu Met Lys Phe Leu Asn Lys Asn Asp Met
1
                                    10
```

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Ile Ser Val Gly Glu Cys Phe Ala Gln Tyr Tyr Phe Phe Cys Phe Ser
Ala Thr Thr Glu Ile Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr
                            40
Val Ala Ile Cys Asn Pro Leu Leu Tyr Leu Val Val Met Ser Lys Arg
                        55
Leu Cys Thr Val Phe Ile Ser Leu Ser Tyr Ile Ile Gly Val Leu Asn
                    70
                                        75
Pro Ile Val His Val Gly Leu Leu Phe Arg Leu Thr Phe Cys Lys Ser
                                    90
                                                         95
Asn Val Ile Asp His Phe Tyr Cys Glu Ile Leu Pro Leu Tyr Thr Ile
                                105
                                                     110
            100
Ser Cys Thr Asp Ala Ser Leu Asn Ala Leu Val Ile Phe Ile Phe Ala
                            120
                                                 125
Ser Ser Ile Gln Ile Ser Thr Ser Val Thr Ile Ile Val Ser Tyr Ala
                        135
                                             140
Arg Val Leu Phe Ser Val Leu Asn Met Lys Ser Glu Lys Gly Arg Arg
                    150
                                        155
                                                             160
Lys Ala Phe Phe Thr Cys Ser Ala His Leu Leu Ser Val Ser Leu Phe
                                    170
                                                         175
                165
Tyr Gly Thr Leu Leu Phe Met Tyr Val Ser His Gly Ser Ala Pro Gly
            180
                                185
                                                     190
Glu Asn Gln Asp Lys Met Tyr Ser Leu Phe Tyr Thr Val Val Ile Pro
                            200
                                                 205
Leu Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Glu Val Leu Cys
                        215
                                             220
Ala Leu Arg Lys Val Val Lys
<210> 2574
<211> 281
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (154)...(208)
<223> Any amino acid
<400> 2574
Met Gly Gln Ser Asn Asn Val Thr Glu Phe Val Leu Leu Gly Phe Thr
                 5
                                    10
                                                         15
Gln Asp Pro Ala Gly Gln Lys Ala Leu Phe Val Met Phe Ser Leu Met
            20
                                25
Tyr Ile Ala Thr Met Val Gly Asn Leu Leu Ile Val Gly Thr Val Ile
        35
                            40
                                                 45
Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
                        55
Ser Leu Met Asp Ala Val Tyr Ser Thr Ala Ile Ser Pro Lys Leu Ile
                    70
                                        75
                                                             8.0
Val Asp Leu Leu Arg Glu Lys Lys Thr Ile Ser Phe Arg Ala Cys Ile
                                                         95
                                    90
                85
Ser Gln Leu Phe Ile Glu His Leu Phe Gly Gly Val Asp Ile Val Ile
            100
                                105
                                                     110
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                                                 125
        115
                            120
His Tyr Leu Ile Ile Met Asn Arg Arg Val Cys Ile Leu Phe Leu Val
    130
                        135
```

```
Met Ala Trp Val Gly Gly Phe Val His Xaa Xaa Xaa Xaa Xaa Xaa Xaa
                 150
170
             165
180
                           185
                                             190
195
                        200
Phe Leu Phe Phe Val Pro Cys Ile Phe Met Tyr Val Arg Pro Val Ser
                    215
                                      220
Ser Phe Pro Ile Asp Lys Ser Ile Thr Val Ile Tyr Thr Ile Val Thr
                 230
                                  235
Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Ser Glu Met Lys
             245
                               250
Asn Ser Met Glu Lys Leu Leu Gln Lys Met Leu Ser Pro Asn Arg Ile
                           265
Lys Leu Ser Ser Cys Cys Ser Tyr Asp
<210> 2575
<211> 253
<212> PRT
<213> Mus musculus
<220>
<221> VARIANT
<222> (108)...(127)
<223> Any amino acid
<400> 2575
Met Leu His Val Asn Ile Thr Asn Thr Ile Phe Ser Thr Phe Leu Val
              5
                               10
1
Thr Gly Ile Pro Gly Leu Glu Ala Val Tyr Ile Trp Ile Ala Ile Pro
                           25
Phe Cys Ala Met Phe Leu Ile Thr Met Val Gly Asn Met Thr Ile Ile
                        40
Ile Val Ile Trp His Glu Gln Thr Leu His Val Pro Met Tyr Leu Phe
Leu Ala Met Leu Ala Ser Ser Asp Leu Gly Leu Ser Leu Phe Thr Phe
                                  75
Pro Thr Leu Leu Arg Ile Phe Leu Leu Asn Asp Arg Glu Leu Thr Thr
Thr Ala Cys Phe Thr Gln Met Phe Phe Ile His Xaa Xaa Xaa Xaa Xaa
          100
                           105
120
                                         125
Gly His Lys Trp Cys Gln Ile Gln Asp Ser Leu Asp Leu Glu Leu Gly
                    135
                                      140
Met Val Val Ser Gln Ala Met Val Leu Thr Glu Ala Trp Val Phe Tyr
                 150
                                  155
Lys Ser Asn Thr Ser Leu Leu Asn His Leu Tyr Asn Arg His Ser Cys
                               170
Lys Phe Val Ser Thr Gly Tyr Ile Ser Leu Leu Phe Ser Arg Glu Ile
          180
                           185
                                             190
Leu His Gln Phe Ser Tyr Gln Phe Leu Ile Ile Ile Gln Leu Pro Ile
                        200
Tyr Leu Ile Asp Ile Asn Ile Lys Cys Asn Asn Ser Leu Val Phe Ile
                    215
                                      220
```

```
Val Leu Ser Cys Val Leu Thr Lys Val Val Gln Ser His Ala Thr Leu 225 230 235 240 Ile Glu Val Val Met Glu Glu Gly Lys Asp Leu Pro Asn 245 250
```

<210> 2576 <211> 97 <212> PRT <213> Mus musculus

<400> 2576

 Met
 Glu
 Lys
 Tyr
 Asn
 Leu
 Thr
 Met
 Val
 Thr
 Glu
 Phe
 Ile
 Ile
 Ile
 Leu
 Val
 Pro
 Leu
 Phe
 Leu
 Phe
 Gly
 Leu
 Phe
 Ile
 Ile</th

<210> 2577 <211> 163

<212> PRT <213> Mus musculus

<400> 2577

Leu Gln Ser Ser Val His Val Ala Leu Ala Phe Cys Leu Ser Phe Cys His Ser Asn Val Ile Asn His Phe Phe Cys Asp Ile Pro Pro Leu Leu 25 Asp Ile Ser Cys Ser Asp Thr His Thr Asn Glu Ile Thr Leu Leu Val Leu Ala Thr Leu Asp Val Val Phe Thr Leu Leu Val Ile Leu Asn Thr 55 Tyr Leu Leu Ile Phe Ile Ala Ile Leu Arg Met Arg Ser Ala Glu Ala 70 Gln Arg Lys Ala Phe Ser Thr Cys Ala Ser His Leu Ile Thr Val Ser 90 Ile Phe Phe Gly Ser Leu Ile Phe Met Tyr Leu Gln Pro Ser Phe Asn 100 105 110 His Ser Met Asp Thr Asp Lys Ile Ala Ser Val Phe Tyr Thr Met Val 120 125 Ile Pro Met Leu Asn Pro Val Val Tyr Ser Leu Arg Asn Lys Glu Val 140 Lys Asn Ala Phe Lys Lys Val Val Glu Lys Leu Met Ser Ser Phe His 145 150 155 Leu Val Asp

```
<211> 124
<212> PRT
<213> Mus musculus
<400> 2578
Ser Leu Leu Cys Phe Thr Lys Ser Phe Leu Gly Ala Leu Val Leu Met
1
Gln Leu Ala Leu His Pro Arg Gly Ala Val Leu Gln Phe Gln Lys Thr
                                25
Leu Leu Thr Thr Val Asp Lys Asn Arg Trp Met Ser Ser Ala Ala Gly
Arg Lys Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Ala Val Thr
Ile Phe Tyr Gly Thr Leu Ala Tyr Met Tyr Leu His Pro His Thr Asn
Asp Ser Gln Glu Gln Glu Lys Ala Ala Ser Val Phe Tyr Gly Ile Ile
Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Gln Asp Val
            100
                                105
Ile Glu Ala Phe Lys Lys Ile Ala Lys Lys Cys Leu
<210> 2579
<211> 262
<212> PRT
<213> Mus musculus
<400> 2579
Arg Leu Pro Leu Val Gly Trp Pro Phe Leu Leu Cys Phe Cys Gln Pro
                                    10
1
Met Ser Ile Gly Asp Val Ser Ile Phe Val Leu Phe Asn Lys Glu Met
                                25
Asn Ile Pro Met Tyr Phe Leu Ser Ile Leu Pro Thr Leu Asp Met Asp
                            40
                                                45
Tyr Val Ser Val Thr Val Pro Asn Thr Cys Ile Asn Thr Leu Ser Asp
                        55
His Arg Asn Ile Ser Val Gly Gly Cys Ala Ala Gln Ile Phe Leu Leu
                                        75
Tyr Ile Cys Thr Cys Val Glu Ile His Phe Phe Thr Thr Met Ala Gln
                85
                                    90
Asp His Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Ser Val Ile Met
                                105
                                                    110
Asn His Arg Leu Cys Val Gln Met Thr Leu Ala Ser Leu Leu Ser Ser
        115
                            120
                                                125
Leu Val Leu Ala Ile Val His Thr Phe Lys Ile Phe Gln Leu Ser Phe
                        135
                                            140
Cys Tyr Ser Ser Met Val Pro Gln Phe Phe Cys Asp Ile Pro Phe Ala
                    150
                                        155
Glu Val Ser Cys Ser Asp Thr Phe Asn Asn Lys Leu Leu Ile Leu Leu
                165
                                    170
Ser Ala Thr Val Val Ser Gly Ser Tyr Phe Val Phe Leu Val Ile Ser
            180
                                185
                                                    190
Tyr Ala His Arg Leu Ser Asn Val Leu Lys Phe Pro Val Lys Arg Glu
Ile Gly Lys Ala Phe Ser Thr Phe Val Leu His Phe Ile Val Val Ser
                        215
```

Val Phe Leu Cys Ser Gly Ala Tyr Val Tyr Leu Ser Thr Leu Gly Thr

235

Ile Val Thr Leu Glu Val Lys Glu Met Ile Leu Ser Val Phe Tyr Thr 245 250 Ile Ala Thr Pro Phe Phe 260 <210> 2580 <211> 194 <212> PRT <213> Mus musculus <400> 2580 Phe Phe Pro Asn Met Trp Val Ala Val Ser Tyr Tyr Trp Gln Cys Pro Leu Ser Tyr Arg Tyr Val Pro Ile Cys Tyr Pro Leu Arg Tyr Met Ser Ile Lys Ser Leu Asn Leu Tyr Val Leu Leu Val Val Ile Ser Trp Ala Phe Pro Ser Ala Asn Ala Leu Val His Ile Leu Leu Leu Ala Arg Leu 55 Ser His Phe Arg His Asn Thr Ile Pro His Ile Phe Lys Arg Ser Ala Leu Leu Asn Leu Ser Ser Ser Glu Thr Ile Ile Asn Glu Leu Val Ile Leu Pro Leu Gly Thr Val Ile Ile Leu Val Thr Tyr Gly Leu Ile Arg 100 105 Val Thr Ile Leu Arg Thr Leu Pro Ile Lys Gly Ile Cys Lys Ala Leu 115 120 Ser Thr Cys Asp Ser His Leu Ser Val Ser Leu Tyr Tyr Gly Ala Ile 135 140 Ile Gly Leu Tyr Leu Val Pro Ser Ser Asn Asn Ile Asn Asp Lys Asp 150 155 Val Asn Val Ser Ala Ile Tyr Asn Val Val Ile Pro Met Ile Asn Thr 170 175 165 Leu Ile Tyr Ser Leu Arg Asn Trp Asp Ile Ile Leu Ser Glu Val Thr 185 Gln Thr <210> 2581 <211> 188 <212> PRT <213> Mus musculus <400> 2581 Ser Asn Pro Ala Ser Thr Leu Ile Tyr Ser Thr Gln Met Asn His Ile 10 Ile Gln Arg Ile Leu Val Ala Ser Ser Trp Val Cys Ser Phe Ser Ser 25 Val Leu Thr His Thr Val Ala Ile Ser Thr Leu His Phe Cys Gly Leu Asn Val Val Asn Asn Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu

Ser Cys Ser Thr Thr Gln Leu Asn Glu Leu Leu Phe Ala Val Gly

Phe Leu Met Thr Glu Thr Ser Met Ala Leu Ile Phe Thr Phe Tyr Ile

Tyr Gly Ala Val Ala Ile Leu Gln Ile Arg Ser Ala Glu Gly Arg Lys

```
100
                                105
Ala Phe Ser Thr Tyr Ser Ser His Leu Thr Val Val Ala Ile Phe Tyr
                            120
                                                125
Gly Thr Gly Ile Phe Ala Tyr Met Ser Leu Arg Ser Ile Lys Leu Ser
                        135
                                            140
Asp Asn Asp Lys Ala Ile Gly Ile Phe Asn Thr Val Ile Asn Pro Met
                    150
145
Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Ala Ala
                                    170
Leu Trp Lys Val Leu Thr Gly Lys Gln Leu Ser His
<210> 2582
<211> 331
<212> PRT
<213> Mus musculus
<400> 2582
Phe Phe Lys Phe Thr Thr Ser Thr Asp Glu Asp Leu Phe Lys Gln Glu
                 5
                                    10
Lys Leu Asn Ala Ser Thr Leu Met Glu Phe Thr Leu Leu Gly Phe Ser
Asn Val Pro His Leu Gln Trp Val Leu Phe Met Val Phe Leu Phe Met
Tyr Met Thr Ile Leu Leu Cys Asn Ser Ile Ile Ile Val Leu Ala Lys
                        55
Thr Asp Pro Ala Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser Asn Phe
Ser Phe Leu Glu Ile Cys Tyr Val Thr Ala Thr Ile Pro Arg Met Leu
                                    90
Met Asp Leu Tyr Thr Leu Lys Gly Asn Ile Ser Val Phe Ala Cys Ala
            100
                                105
Thr Gln Met Tyr Phe Val Leu Met Leu Gly Ala Thr Glu Cys Leu Leu
        115
                            120
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu
                        135
Gln Tyr Ser Leu Leu Met Lys Asn Lys Val Cys Leu Gln Leu Val Ala
                    150
                                        155
Ala Ser Trp Ile Ser Gly Ile Pro Val Glu Ile Gly Gln Thr Tyr Gln
                165
                                    170
Ile Phe Ser Leu His Phe Cys Ala Ser Asn Arg Ile Asp His Phe Phe
            180
                                185
Cys Asp Ile Pro Pro Leu Leu Lys Leu Ala Cys Gly Asp Thr Phe Met
        195
                            200
Asn Thr Val Ala Val Tyr Val Val Ala Val Val Phe Val Met Val Pro
                        215
Phe Leu Leu Ile Ile Val Ser Tyr Ile Lys Ile Ile Cys Asn Ile Met
                                        235
Lys Leu Ser Ser Ala Lys Gly Met Ala Lys Ala Phe Ser Thr Cys Ser
                                    250
Ser His Leu Ile Val Val Ile Leu Phe Tyr Gly Thr Ala Ser Ile Thr
```

260 265 270 Tyr Leu Gln Pro Lys Gln Ser Gln Ser Glu Gly Met Gly Lys Met Leu

285

300

315

280

295

310

Ser Leu Phe Tyr Thr Ile Leu Ile Pro Ala Leu Asn Pro Ile Ile Tyr

Ser Leu Arg Glu Gln Arg Tyr His Asp Gly Leu Leu Arg Lys Leu His

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<210> 2583
 <211> 297
 <212> PRT
 <213> Mus musculus
 <400> 2583
 Met Gly Gln Ser Asn Asn Val Thr Glu Phe Val Leu Leu Gly Phe Thr
 Gln Asp Pro Ala Gly Gln Lys Ala Leu Phe Val Met Phe Ser Leu Met
                                  25
 Tyr Ile Ala Thr Met Val Gly Asn Leu Leu Ile Val Gly Thr Val Ile
 Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
 Ser Leu Met Asp Ala Val Tyr Ser Thr Ala Ile Ser Pro Lys Leu Ile
 Val Asp Leu Leu Arg Glu Lys Lys Thr Ile Ser Phe Arg Ala Cys Ile
 Ser Gln Leu Phe Ile Glu His Leu Phe Gly Gly Val Asp Ile Val Ile
             100
                                  105
                                                      110
· Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                             120
 His Tyr Leu Ile Ile Met Asn Arg Arg Val Cys Ile Leu Phe Leu Val
                         135
                                              140
 Met Ala Trp Val Gly Gly Phe Val His Ala Leu Phe Gln Val Leu Ala
                     150
                                          155
 Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Gly
                 165
                                      170
 Cys Asp Ile Tyr Pro Leu Leu Leu Ala Cys Thr Asp Thr Tyr Phe
             180
                                  185
                                                      190
 Ile Gly Leu Ser Val Ile Gly Asn Asn Gly Ala Met Cys Ile Val Ile
                              200
 Phe Ile Leu Leu Leu Ser Tyr Gly Ile Ile Leu Arg Ser Leu Lys
 Asn His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser
                     230
 His Ile Thr Val Val Phe Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
 Val Arg Pro Val Ser Ser Phe Pro Ile Asp Lys Phe Ile Thr Val Ile
                                  265
 Tyr Thr Ile Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
 Asn Ser Glu Met Lys Asn Ser Arg Lys
     290
 <210> 2584
 <211> 316
 <212> PRT
 <213> Mus musculus
 <400> 2584
 Ser Gln Thr Ala Asp Pro Lys Asn Ser Ser Ser Thr Val Thr Glu Phe
                                      10
```

Ile Leu Val Gly Phe Glu Gln Ser Ser Pro Ser Thr Arg Ala Leu Leu

```
Phe Thr Leu Phe Leu Ala Leu Tyr Ser Leu Ala Met Ala Met Asn Gly
                            40
Leu Ile Ile Phe Ile Thr Trp Thr Asp Pro Arg Leu Asn Ser Pro Met
                        55
Tyr Phe Phe Leu Gly His Leu Ser Phe Leu Asp Val Cys Phe Ile Thr
                    70
                                        75
Thr Thr Ile Pro Gln Met Leu Val His Leu Val Thr Lys Asn His Thr
Val Ser Phe Val Ser Cys Met Thr Gln Met Tyr Leu Val Phe Leu Val
                                105
Gly Val Ala Glu Cys Ile Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr
                            120
                                                125
Val Ala Ile Cys His Pro Leu Asn Tyr Ala Gln Ile Met Ser Gln Lys
                        135
Val Cys Val Arg Leu Val Cys Ser Ser Trp Ile Phe Gly Met Val Asn
                                        155
Gly Ile Phe Leu Glu Tyr Ile Ser Phe Arg Asn Pro Phe Cys Lys Asp
                                    170
                                                         175
Asn His Ile Glu Asn Phe Phe Cys Glu Ala Pro Ile Val Ile Ala Leu
                                185
Ser Cys Gly Asp Leu Lys Phe Thr Met Lys Leu Ile Phe Val Asp Ala
                            200
        195
Ile Val Val Leu Leu Ser Pro Met Val Leu Ile Ile Thr Ser Tyr Ala
                        215
Arg Ile Leu Ala Ser Ile Leu His Arg Ala Ser Ser Ser His Arg
Lys Thr Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Ile Phe Leu
                                    250
Tyr Thr Ser Ala Met Phe Ser Tyr Met Asn Pro Arg Ser Thr His Gly
                                265
Pro Asp Lys Asp Lys Ser Phe Ser Leu Leu Tyr Thr Ile Ile Met Pro
                            280
Met Cys Asn Pro Val Ile Tyr Ser Phe Arg Asn Lys Glu Met Lys Gly
                        295
                                             300
Ala Met Gly Arg Ala Leu Gly Arg Gly Ser Leu Ala
<210> 2585
<211> 318
<212> PRT
<213> Mus musculus
<400> 2585
Glu Ala Asn Asp Ser Val Val Lys Glu Phe Ile Phe Ile Gly Leu Ser
                                    10
Asp Ser Gln Gly Leu Gln Ile Phe Leu Phe Ala Phe Phe Leu Ile Phe
                                25
Tyr Val Gly Ile Val Phe Gly Asn Leu Leu Ile Val Met Thr Val Thr
                            40
Tyr Asp Ser His Leu His Ser Pro Met Tyr Phe Leu Leu Ala Asn Leu
                        55
Ser Phe Ile Asp Leu Cys Leu Ser Ser Val Thr Ala Pro Lys Met Ile
                    70
                                        75
Ala Asp Phe Phe Arg Lys His Lys Val Ile Ser Val His Gly Cys Phe
                85
                                    90
                                                        95
Ala Gln Ile Phe Leu Leu His Phe Phe Gly Gly Ser Glu Leu Val Thr
```

110

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Leu Ile Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
Arg Tyr Thr Ile Ile Met Arg Gly Asn Val Cys Ala Gly Ile Val Ala
                        135
Thr Ala Trp Ala Thr Gly Phe Leu His Ser Val Ser Gln Leu Ala Phe
                    150
                                        155
Ala Val Asn Leu Pro Phe Cys Gly Pro Asn Lys Val Asp Ser Phe Tyr
                165
                                    170
Cys Asp Leu Pro Arg Val Ile Lys Leu Ala Cys Ala Asp Thr Tyr Arg
                                185
Leu Asp Ile Met Val Ile Ala Asn Ser Gly Val Leu Thr Val Cys Ser
       195
Phe Val Leu Leu Ile Ile Ser Tyr Ser Ile Ile Leu Thr Thr Ile Gln
                        215
Arg Arg Pro Ser Asp Arg Ser Ser Lys Ala Leu Ser Thr Leu Thr Ala
                    230
                                        235
His Ile Thr Val Val Leu Leu Phe Phe Gly Pro Cys Ile Phe Ile Tyr
                                    250
Ala Trp Pro Phe Pro Ile Lys Ser Leu Asp Lys Phe Leu Ala Val Phe
            260
                                265
Tyr Ser Val Val Thr Pro Leu Leu Asn Pro Ile Ile Tyr Thr Leu Arg
                            280
Asn Thr Glu Met Lys Thr Ala Met Arg Arg Pro Glu Thr Met Glu Phe
                        295
Lys Leu Leu Gly Glu Leu Ile Asp Leu Leu Trp Pro Arg Asp
```

<211> 310

<212> PRT

<213> Mus musculus

<400> 2586

Met Gly Ala Thr Asn Asp Ser Thr Phe Ser His Phe Ile Leu Thr Gly 10 Phe Ser Asp Arg Pro Glu Leu Glu Arg Val Leu Phe Ala Ile Leu Leu Pro Ala Tyr Leu Leu Thr Leu Leu Gly Asn Ser Thr Ile Ile Leu Val 40 Ser Arg Leu Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Thr His Leu Ser Phe Leu Asp Leu Ser Phe Thr Ser Ser Ser Ile Pro Gln 70 75 Leu Leu Tyr Asn Leu Ser Gly Pro Asp Lys Thr Ile Ser Tyr Val Gly 90 Cys Ala Leu Gln Leu Val Leu Phe Leu Gly Leu Gly Gly Val Glu Cys 105 Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Lys 120 125 Pro Leu His Tyr Met Val Ile Met Ser Pro Arg Leu Cys Val Gly Leu 140 Val Ser Val Ala Trp Ser Cys Gly Val Ala Asn Ser Leu Ala Met Ser 150 155 Pro Ala Thr Leu Ser Leu Pro Arg Cys Gly His His Arg Val Asp His 170 175 Phe Leu Cys Glu Met Pro Ala Leu Ile Arg Met Ala Cys Val Asn Thr 185 Ala Ala Val Glu Gly Thr Val Phe Val Leu Ala Ile Gly Ile Val Leu

```
195
                            200
                                                205
Ser Pro Leu Val Phe Ile Leu Val Ser Tyr Gly Tyr Ile Val Arg Ala
                        215
                                            220
Val Leu Gln Ile Arg Ser Ala Ala Gly Arg Gln Lys Ala Phe Asn Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Asn Ile Ile
                                    250
Tyr Met Tyr Met Gln Pro Gly Asn Ser Ser Ser Gln Asp Gln Gly Lys
            260
                                265
Phe Leu Thr Leu Phe Tyr Asn Ile Val Thr Pro Leu Leu Asn Pro Leu
                            280
Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Arg Arg Leu
                        295
Leu Leu Gly Ser Arg Glu
<210> 2587
<211> 316
<212> PRT
<213> Mus musculus
<400> 2587
Met Ser Asn Ser Glu Leu Met Lys Asn Gly Ser Leu Ser Leu Cys Thr
                 5
                                    10
Glu Phe Thr Leu Val Ala Phe Ser Ser Leu Ala Glu Leu Gln Leu Val
                                25
            20
Leu Phe Val Val Phe Leu Val Leu Tyr Leu Phe Thr Val Gly Gly Asn
                            40
                                                45
Leu Thr Ile Ile Cys Val Ile Trp Thr Thr Pro Ser Leu His Thr Pro
                        55
Met Tyr Phe Phe Leu Ala Asn Leu Ser Phe Leu Glu Met Cys Tyr Ile
                    70
                                        75
Ser Ser Val Val Pro Gln Met Leu Val His Leu Leu Val Gln Leu Lys
                85
                                    90
Thr Ile Ser Val Ala Gly Cys Ala Ala Gln Met Tyr Val Phe Thr Ile
            100
                                105
                                                    110
Leu Gly Leu Thr Glu Cys Cys Leu Leu Ala Thr Met Ala Tyr Asp Arg
        115
                            120
                                                125
Phe Val Ala Ile Cys Tyr Pro Leu His Tyr Thr Leu Trp Met Asp Pro
                        135
                                            140
Ser Val Cys Leu Lys Leu Ala Gly Ala Ser Trp Met Thr Gly Ile Leu
                    150
                                        155
Val Glu Ser Ala Gln Thr Thr Trp Ile Phe Thr Leu Pro Phe Cys Gly
                                    170
                                                        175
Ala Gly Thr Ile Gln His Phe Phe Cys Asp Ile Met Pro Val Val Lys
            180
                                185
                                                    190
Leu Ala Cys Val Asp Thr Ser Gln Asn Glu Met Val Ile Phe Ile Ile
        195
                            200
                                                205
Ser Leu Ile Phe Ile Met Ser Pro Cys Leu Phe Ile Leu Cys Ser Tyr
                        215
                                            220
Val Arg Ile Ile Leu Thr Ile Leu Lys Met Pro Ser Ala Ala Gly Arg
                    230
                                        235
His Lys Ala Phe Ser Thr Cys Ser Ser His Ile Leu Val Val Ser Leu
                                    250
Phe Tyr Gly Thr Ala Leu Phe Thr Tyr Leu Gln Pro Lys Ser Ser His
                                265
Thr Pro Asp Thr Asp Lys Val Thr Ala Leu Met Tyr Thr Val Val Thr
        275
                            280
```

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Pro Ala Leu Asn Pro Val Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys
                        295
Glu Ala Phe Gln Lys Val Thr Gln Lys Glu Thr Ser
<210> 2588
<211> 311
<212> PRT
<213> Mus musculus
<400> 2588
Met Gly Gly Lys Asn Gln Thr Asp Val Ser His Phe Phe Leu Leu Gly
                                    10
Leu Thr Asp Asp Pro Thr Val Lys Pro Val Ile Phe Cys Ile Phe Leu
          20
                                25
Leu Met Tyr Met Val Thr Ile Leu Gly Asn Leu Leu Ile Ile Leu Ala
                           40
Val Cys Ser Tyr Ser His Leu Gln Thr Pro Met Tyr Phe Phe Ile Ser
                       55
                                            60
Asn Leu Ser Ile Asn Asp Ile Cys Leu Ser Thr Thr Val Ile Pro Asn
            . 70
                                       75
Met Leu Arg Thr Thr Gln Thr Gln Asp Gln Ser Ile Ser Tyr Ala Gly
               85
                                    90
Cys Leu Thr Gln Leu Cys Phe Val Leu Leu Phe Ala Gly Phe Glu Ser
           100
                                105
                                                    110
Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Tyr
      115
                           120
Pro Leu Ser Tyr Thr Val Met Met Asn Phe His Ser Cys Ala Leu Leu
                       135
                                           140
Ile Leu Phe Ser Val Leu Ile Ser Val Leu Asn Met Gly Leu Leu Gly
                   150
                                       155
Leu Met Val Leu Arg Leu Ser Phe Cys Thr Asn Leu Glu Ile Pro Leu
                                   170
               165
                                                       175
Phe Phe Cys Glu Leu Ser Gln Val Met Lys Leu Ala Cys Ser Asp Thr
           180
                                185
                                                   190
Leu Ile Asn Asp Ile Leu Ile Tyr Leu Ala Thr Phe Ile Phe Gly Gly
       195
                           200
Ile Pro Ile Ser Gly Ile Ile Phe Ser Tyr Val Gln Ile Ala Ser Ser
                       215
                                           220
Val Leu Arg Ile Ser Ser Val Lys Gly Arg Cys Lys Ala Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Thr Ser Leu Ser Tyr Gly Ser Gly Leu
                                    250
                245
                                                        255
Trp Val Tyr Ile Thr Ser Ser Val Ala Ile Leu Pro Lys Lys Thr Ser
                                265
                                                   270
Val Ala Cys Ile Met Tyr Thr Val Val Pro Gln Met Leu Asn Pro Phe
                           280
       275
                                               285
Ile Phe Ser Leu Arg Asn Lys Asp Met Lys Gly Thr Met Lys Lys Phe
                       295
Ile Ser Lys Val Ala Ser Leu
<210> 2589
<211> 310
<212> PRT
```

<213> Mus musculus

```
<400> 2589
Met Ser Ser Phe Asn Thr Thr Leu Lys Gly Gly Phe Ile Leu Met Gly
                                    10
1
Phe Ser Asp Trp Pro Gln Leu Glu His Ile Phe Phe Val Phe Ile Ser
Met Phe Tyr Ile Leu Thr Ile Phe Gly Asn Phe Thr Ile Ile Thr Ile
Ser Arq Met Asp Gln Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Asn
Asn Leu Ser Phe Leu Asp Leu Cys Tyr Asn Thr Ser Ile Val Pro Gln
                    70
Leu Leu Val Asn Ile Ser Gly Ile Asp Lys Thr Met Ser Tyr Ala Gly
                                    90
Cys Met Thr Gln Phe Phe Ile Val Leu Leu Gly Gly Thr Glu Cys
            100
                                105
Met Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys His
                            120
Pro Leu His Tyr Thr Ser Ile Met His Pro Leu Leu Cys His Ala Leu
                        135
Ala Ile Ser Ser Trp Val Gly Gly Leu Val Asn Ser Leu Thr Gln Thr
                    150
Ser Leu Ile Met Thr Ile Pro Leu Cys Gly His His Leu Asn His Phe
                                    170
                165
Phe Cys Glu Met Leu Val Leu Leu Lys Leu Ala Cys Glu Asp Thr Val
            180
                                185
                                                    190
Gly Thr Glu Ala Asn Leu Phe Val Ala Gly Ala Ile Ile Leu Val Cys
        195
                            200
Pro Val Ala Leu Ile Leu Gly Thr Tyr Ala His Ile Ala His Ala Val
                        215
Leu Lys Ile Lys Ser Arg Ser Gly Arg Arg Lys Ala Leu Gly Thr Cys
                    230
Gly Ser His Leu Thr Gly Val Phe Leu Phe Tyr Gly Ser Ala Met Tyr
                245
                                    250
Met Tyr Leu Gln Pro Val His Val Tyr Ser Gly Ser Glu Gly Lys Phe
            260
                                265
                                                    270
Ala Ala Leu Phe Tyr Thr Ile Ile Thr Pro Met Met Asn Pro Ile Tyr
        275
                            280
Thr Leu Lys Asn Lys Asn Val Lys Gly Ala Leu Cys Lys Val Leu Gly
Arg Asp Thr Ser Thr Thr
305
<210> 2590
<211> 316
<212> PRT
<213> Mus musculus
<400> 2590
Met Ala Val Met Leu Gly Leu Asn Tyr Thr Phe Val Ser Glu Phe Ile
Leu Ile Gly Phe Ser Thr Phe Pro His Leu Gln Leu Met Phe Phe Leu
Leu Phe Leu Leu Met Tyr Leu Phe Thr Leu Leu Gly Asn Leu Leu Ile
Met Thr Thr Ile Trp Ser Glu His Ser Leu His Thr Pro Met Tyr Leu
                        55
Phe Leu Cys Ala Leu Ser Ile Ser Glu Ile Phe Tyr Thr Phe Ala Ile
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Ile Pro Arq Met Leu Ala Asp Leu Leu Thr Thr Leu His Ser Ile Ala
Phe Leu Ala Cys Ala Ser Gln Met Phe Phe Ser Phe Thr Phe Gly Phe
            100
                                105
Thr His Ser Phe Leu Leu Thr Val Met Gly Tyr Asp Arg Tyr Val Ala
Ile Cys His Pro Leu Arg Tyr Asn Val Leu Met Ser Pro Arg Gly Cys
                        135
Ala Cys Leu Val Ala Trp Ser Trp Val Gly Gly Ser Phe Met Gly Thr
                    150
                                        155
Val Val Thr Thr Ala Ile Phe Asn Leu Thr Phe Cys Gly Pro Asn Glu
                                    170
Ile His His Phe Thr Cys His Val Pro Pro Leu Leu Lys Leu Ala Cys
                                185
Gly Glu Asn Val Leu Glu Val Ala Lys Gly Val Glu Ile Val Cys Ile
                            200
Thr Ala Leu Leu Gly Cys Phe Leu Leu Ile Leu Leu Ser Tyr Ala Phe
Ile Val Val Thr Ile Leu Lys Ile Pro Ser Ala Glu Gly Arg His Lys
Ala Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Val His Tyr
                                    250
Gly Phe Ala Ser Val Ile Tyr Leu Lys Pro Lys Gly Pro Lys Ser Leu
                                265
Glu Gly Asp Thr Leu Met Gly Ile Thr Tyr Thr Val Leu Thr Pro Phe
Leu Ser Pro Ile Ile Phe Ser Leu Arg Asn Lys Glu Leu Lys Asn Ala
                        295
Met Glu Glu Ser Phe Pro Gln Gln Ile Ile Ser Thr
                    310
```

<211> 323

<212> PRT

<213> Mus musculus

<400> 2591

Met Leu His Val Asn Ile Thr Asn Thr Ile Phe Ser Thr Phe Leu Val Thr Gly Ile Pro Gly Leu Glu Ala Val Tyr Ile Trp Ile Ala Ile Pro Phe Cys Ala Met Phe Leu Ile Thr Met Val Gly Asn Met Thr Ile Ile Ile Val Ile Trp His Glu Gln Thr Leu His Val Pro Met Tyr Leu Phe Leu Ala Met Leu Ala Ser Ser Asp Leu Gly Leu Ser Leu Phe Thr Phe 70 Pro Thr Leu Leu Arg Ile Phe Leu Leu Asn Asp Arg Glu Leu Thr Thr 85 90 Thr Ala Cys Phe Thr Gln Met Phe Phe Ile His Thr Phe Gln Asp Leu 100 105 Glu Ser Ala Ile Ile Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile 120 125 Ser His Pro Leu His Tyr His Ser Ile Leu Thr Asp Thr Val Ile Ala 135 140 Lys Ile Gly Leu Ala Ile Val Val Arg Thr Leu Thr Val Gln Val Pro 150 155 Leu Pro Ile Leu Leu Lys Arg Leu Tyr Phe Cys His Ser Asn Val Leu

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165
                                    170
Ser His Ser Tyr Cys Leu His Pro Asp Ile Ile Lys Leu Ser Cys Ser
            180
                                185
                                                    190
Ser Thr Thr Val Asn Ser Ile Phe Gly Leu Phe Val Val Leu Ser Thr
        195
                            200
Met Gly Leu Asp Phe Leu Leu Ile Leu Leu Ser Tyr Ala Leu Ile Leu
                        215
                                            220
Lys Thr Val Leu Asn Met Ala Ser His Ser Gly Arg Leu Lys Ala Leu
                    230
                                        235
225
Asn Thr Cys Ile Ser His Leu Cys Ala Val Leu Phe Phe Thr Pro
                245
                                    250
Met Ile Cys Leu Ser Met Leu His Arg Phe Gly Pro Arg Leu Pro Ser
                                265
His Val Tyr Val Thr Leu Ala Asn Met His Phe Leu Ile Pro Pro Val
        275
                            280
Met Asn Pro Ile Val Tyr Val Val Lys Thr Lys Gln Ile Arg Asp Lys
                        295
Ile Gln Lys Leu Phe Ile Arg Lys Ala Thr Lys Lys Ala Gln Ala Ala
Ser Ile Thr
```

<211> 300

<212> PRT

<213> Mus musculus

<400> 2592

Met Glu Lys Thr Asn His Ser Leu Thr Thr Gln Phe Ile Leu Val Gly Phe Ser Asp His Pro Asp Leu Lys Thr Pro Leu Phe Leu Leu Phe Ser 25 Val Ile Tyr Leu Val Thr Met Val Gly Asn Leu Gly Leu Val Ala Val 35 40 Ile Tyr Leu Glu Pro Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly 55 Asn Leu Ala Leu Met Asp Ser Cys Cys Ser Cys Ala Ile Thr Pro Lys 70 75 Ile Leu Glu Asn Phe Phe Ser Val Asp Arg Ile Ser Leu Tyr Glu Cys Met Ala Gln Phe Tyr Phe Leu Cys Leu Ala Glu Thr Ala Asp Cys 100 105 110 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Gln Tyr His Ser Met Met Ser Lys Lys Leu Ser Ile Gln Met 135 140 Ser Ile Gly Thr Phe Ile Thr Ser Asn Leu His Ser Leu Ile His Val 150 155 Gly Cys Leu Leu Arg Leu Thr Phe Cys Lys Ser Asn Arg Ile Asp His 170 Phe Phe Cys Asp Ile Leu Pro Leu Tyr Arg Leu Ser Cys Thr Asp Pro 180 185 Phe Ile Asn Glu Leu Met Ile Tyr Ile Phe Ser Met Pro Ile Gln Val 200 Phe Thr Ile Thr Thr Val Leu Val Ser Tyr Phe Cys Ile Leu Leu Thr 215 220 Ile Phe Lys Met Lys Ser Lys Asp Gly Arg Gly Lys Ala Phe Ser Thr 230 235

```
Cys Ala Ser His Phe Phe Ser Val Ser Ile Phe Tyr Ala Cys Leu Leu
                                     250
                245
Met Tyr Ile Arg Pro Phe Asp Asp Ser Asn Lys Asp Ile Pro Val Ala
                                265
                                                     270
            260
Ile Phe Tyr Thr Ile Ile Ile Pro Leu Leu Asn Pro Phe Ile Tyr Ser
        275
                            280
                                                 285
Leu Arg Asn Thr Glu Val Val Asn Ala Leu Arg Lys
    290
                        295
                                             300
<210> 2593
<211> 10
<212> PRT
<213> Mus musculus
<400> 2593
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
<210> 2594
<211> 7
<212> PRT
<213> Mus musculus
<400> 2594
Phe Ser Thr Cys Ser Ser His
1
<210> 2595
<211> 6
<212> PRT
<213> Mus musculus
<400> 2595
Met Ala Tyr Asp Arg Tyr
1
<210> 2596
<211> 6
<212> PRT
<213> Mus musculus
<400> 2596
Met Ala Phe Asp Arg Tyr
1
```